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# SOUTH AFRICA AS A HEALTH RESORT

BY  
DR ARTHUR FULLER



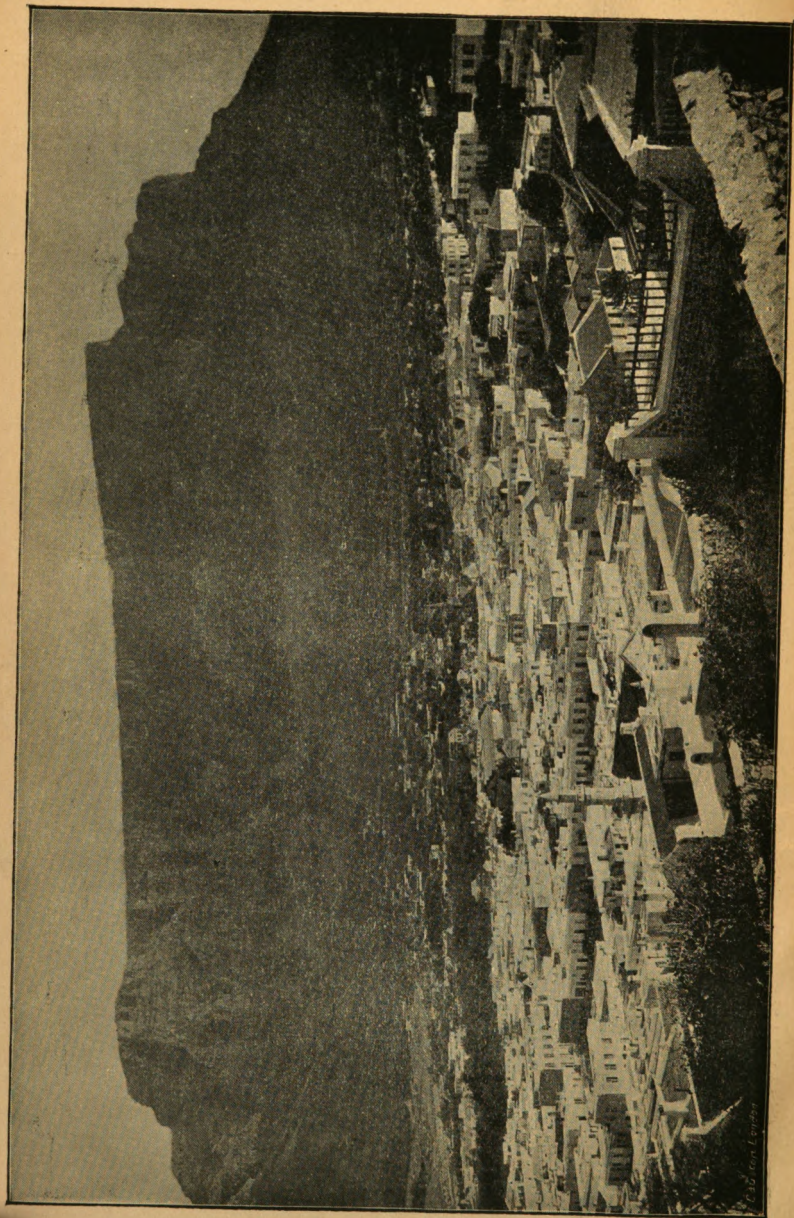
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CAPE TOWN AND TABLE MOUNTAIN.

# SOUTH AFRICA

AS A

## HEALTH RESORT,

WITH ESPECIAL REFERENCE TO THE EFFECTS OF  
THE CLIMATE ON

### *Consumptive Invalids,*

AND FULL PARTICULARS OF THE VARIOUS LOCALITIES  
MOST SUITABLE FOR THEIR TREATMENT,

AND ALSO OF

THE BEST MEANS OF REACHING  
THE PLACES INDICATED.

BY

ARTHUR FULLER,

M.B., C.M. EDIN., M.R.C.S. LONDON (of Kimberley, Cape Colony).

SIXTH EDITION.—55th Thousand.

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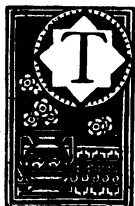
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1903



## PREFACE TO FIRST EDITION.

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THE object of the writer of this pamphlet has been to bring home to the public the value of South Africa as a health resort. He has been struck for some time with the inaccurate information given by writers of high authority in the climatic treatment of phthisis; of the facilities which now exist in South Africa for travelling from one place to another, and also of the localities which are enumerated as suitable for invalids.

The country is often spoken of as if a bullock waggon were still the speediest means of travelling; and in some very able lectures delivered last year the following remark was made:—"The best mode to reach the high regions is still a well-supplied ox waggon from Graham's Town or Wynberg." The latter place, a suburb of Cape Town, and the residence of a large number of its business and professional men, is almost

as innocent of the sight of an ox waggon as some pleasant little English village; while any traveller from the former place can accomplish his journey in a comfortable Pullman car in twenty-four hours to Kimberley, where he is almost within a stone's throw of the Free State border. It is only fair to say that at the time these lectures were delivered the rail was not open to Kimberley—but it was open to the Orange River, a distance of about seventy miles from that town. The places chosen for recommendation as health resorts in these lectures betray (I must say it, and do so with all respect to the extreme value of the lectures alluded to) a complete ignorance of South Africa. Such places as Potchefstroom, Bloemhoff, Christiana, Pretoria, Utrecht, Standerton, Wakkerstroom, Witwatersrand, &c., &c., are mentioned as suitable health resorts. The majority of them are places to which the term "trading stations" would better apply than that of villages, far less towns. Potchefstroom and Pretoria are indeed important places, but are not particularly suitable for invalids, especially the former; and out of a list of eight names mentioned, Heidelberg is the only one entitled to rank highly.

The writer offers this as an excuse to those who know South Africa for writing a short and, what must appear to them, incomplete description of the health resources of the Colony, trusting at the same time that it will prove of some real assistance to consump-

tive patients in their search for relief; and also by giving physicians and medical men at home a general insight into the climatic conditions and means of locomotion in South Africa, to enable them to recommend it with more confidence than they have perhaps hitherto been able to do. The author has further heartily to thank those gentlemen alluded to in the pamphlet who have so kindly assisted him with local details as well as valuable general hints.

The cases appended to the pamphlet are not as numerous as the author would have liked. Such as they are, however, they will, he hopes, show that his sanguine view of the health resources of the country is not arrived at without good reason.

It is well the consumptive invalid should be informed, that in addition to the climatic advantages of the country referred to in these pages, the voyage to South Africa is one of the finest in the world. The Bay of Biscay once passed, fine weather may be anticipated for the remainder of the voyage at any time of the year. Not only is the voyage (which occupies about twenty days) a fine one, but the steam service is everything that could be desired. The Union Company's steamers, which convey Her Majesty's Mails from Southampton and London respectively, are admirably appointed in all respects; and as invalids are frequently passengers, it is within the writer's knowledge that especial attention is paid to their wants and comforts.

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## PREFACE TO SIXTH EDITION.

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SINCE the first edition of this little work was published, South Africa has not only become very much better known, but has greatly extended its boundaries. Whereas ten or fifteen years ago the Vaal River was the limit of our horizon northwards, we are now more or less familiar from description, or by actual travel, with the country as far as the Zambesi.

I have done my best to keep pace with these developments in the last edition, and although I have not been able to attempt detailed description and local colouring, enough, I trust, has been said to indicate the main features of the climate in these newer parts. I have retained the preface to the first edition in its place undisturbed, not because it has the same significance to-day it had twelve years ago, but it marks time in the progress of South Africa.

KIMBERLEY, *June 28th*, 1898.



# SOUTH AFRICA AS A HEALTH RESORT IN CONSUMPTION.

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TO-DAY the climatic treatment of Phthisis stands out more prominently than it ever did as the one hope of arresting the progress of the disease; and it takes a higher rank, because while modern facilities for travelling are daily bringing all parts of the world within easy reach of the tourist or health seeker, modern knowledge leads to a more careful selection of the exact localities suitable for the tubercular invalid. There is less danger now of a patient being packed off to South Africa, and left to find out for himself what part of the country suits him best, and consequently the results of climatic treatment are more satisfactory. Moreover, it is more fairly recognised that time consumed in the use of cod liver oils, tonics, creasotes, and other drugs while the disease is becoming fairly established in the patient's system is valuable time wasted, unless such treatment is used only as an adjunct to climate. While, therefore, not discarding everything in the



way of drugs, it is to a change of climate that we must look for what benefit we may hope for. I do not wish to vaunt South Africa as the **only** place for phthisical invalids, but it is certainly one of the best; and if **complete** cures are not to be always or frequently looked for, it is nevertheless certain that the course of the disease in our up-country districts is usually very much modified and frequently arrested.

The climate of South Africa varies widely in its different parts, but before going into fuller details I shall shortly enumerate the most important influences which combine to produce what we term, as a whole, the "climate" of a country, considering them with special reference to the effects, deleterious or beneficial, which they are found to exert on the consumptive patient.

The principal features which go to make up a climate are—"temperature," "moisture," "atmospheric pressure," "sunshine," "wind," "rain and snow," "nature of soil," "elevation above sea-level," and although they hardly come under the head of climate, we may add "hygienic surroundings," important as they are in relation to their influence on diseases of the chest.

It is unnecessary to go minutely into the details of all these, but a few general facts may be mentioned in relation to the more important of them.

Starting first with "*Temperature*," we find that a

warm one, 60° to 80° F., is favourable to healthy and particularly so to consumptive persons, but it is by no means necessary to either ; and other influences, more especially that of moisture of the atmosphere, play so much more important a part that it frequently happens that cold climates which have advantages in the way of dryness, high elevation, &c., such as the health resorts on the Swiss Alps, and the slopes of the Rocky Mountains in America, are far healthier than much warmer climates, which the dampness of the air and other circumstances render more deleterious to the consumptive patient than is compensated for by the absence of cold.

Still we must on the whole consider a warm climate favourable to consumptive patients, and if moist warmth is to be avoided in seeking a place of residence, moist cold is doubly so.

"*Moisture*" must thus be considered as one of the most important items which go to make up a climate suitable or the reverse to the consumptive patient. Its influence cannot be overrated, and it may be positively asserted that no damp climates, whatever other favourable influences are present, and however mild they may be with regard to temperature, are well tolerated by the consumptive invalid. Dryness of the air, on the other hand, is of the greatest value. Both heat and cold are rendered more easily bearable when they exist in conjunction with it. We have often heard Colonists, well seasoned to the hottest parts of

South Africa, complain of the heat of an English summer as being more trying in its way than that to which they had been accustomed in their own country, where the dryness of the air renders it more tolerable and less enervating.

The same may be said of dry cold. It is not the bright cold day, when the sun shines like a ball of red fire, and the ground is hard under foot with a frost of perhaps  $10^{\circ}$  to  $15^{\circ}$  F., that is trying to the invalid, but the damp, muggy thaw which follows it, and which chills even the healthiest of us.

*"Atmospheric Pressure and Elevation"* may be taken together, the former being dependent upon and varying in accordance with the latter. A *high elevation*, and therefore a *rarified atmosphere*, used to be considered injurious to invalids, and was said to predispose to hæmorrhage from the lungs, but since the climatic treatment of phthisis has been more fully studied the very opposite of this is found to be really the case. And whether it be due in part to the rarification of the atmosphere, which has been asserted to act beneficially by causing increased expansion of the chest, or to the other associated conditions such as the facts recently discovered, that the percentage in the atmosphere of bacterial organisms diminishes as the elevation increases, the fact now stands that all our most recently approved health resorts are situated upon high elevations, often several thousand feet above sea-level. *"Wind"* is of

some importance also, and localities where strong winds prevail are not as a rule suited for invalids. Cold is much more easily borne in the absence of it. In another way, by causing dust, wind is harmful, and many climates are seriously impaired at certain seasons of the year by their dust storms. We look then upon wind as an injurious feature in a climate when it is at all excessive.

Of the remaining influences, "*Sunshine*" is of course beneficial, and sunny are always to be preferred to cloudy skies. This is an important factor in our up-country climate where the winters are for six months of the year almost cloudless and rainless.

"*Rain and Snow and Nature of Soil*" are principally of importance in so far as they affect the humidity of the atmosphere, but the nature of the rainfall and its distribution at certain seasons of the year should be noted. In many parts of South Africa, for instance, it may be literally said, that "it never rains but it pours," and an inch of rain may fall in an hour, which would take a day in England. This of course exerts a marked influence on the humidity of the atmosphere, which is much lessened for the whole day with the more rapid downpour. Then again, its distribution with regard to seasons is of considerable importance, a heavy winter rainfall being productive of that damp cold, which is of all things most injurious. On the other hand, climates in which the rainfall occurs in heavy downfalls during the summer months are much

more readily borne, rapid evaporation causing a speedy dispersion of the moisture in the surrounding air.

"*Hygienic Surroundings*" have long been recognised as of the greatest importance in the treatment of phthisis, and have been more than ever brought into prominence by the discoveries of Koch in relation to the minute organism which he has shown to be the active cause of the disease. The more closely human beings are congregated together the more abundant will be that wonderful micro-organic life which goes on unseen, and often unheeded, around us and about us, exerting its baneful influence on the crowded millions packed in our great cities, sweeping them down in its epidemics of typhoid, it may be, or more insidiously, but not less surely, eating away their lives with consumption.

That phthisis is infectious is no longer an open question; it thrives best in thickly populated districts, and this is true to some extent where sanitary improvements have brought these surroundings to the highest state of perfection. No doubt the better drained and better ventilated a house is the more healthy it is, and improved sanitation does much towards improving the health of our large towns; but what the consumptive invalid requires (and what he cannot get in the most sanitary of towns) is *pure unbreathed air*. He finds this only in the country districts, and he finds it to perfection at high altitudes in sparsely populated districts, of which there is no

better example than the elevated plateaux of South Africa.

To sum up, then, the points most to be sought after in a climate for the class of invalids we are considering are—dryness of atmosphere with rapid summer rainfall, elevation above sea-level, absence of crowding, with a preference for warmth as compared to cold, a good proportion of sunshine, with as little wind as possible.

#### EUROPEAN CLIMATE.

A glance at the meteorological records of Great Britain and Ireland will show the disadvantages under which the phthisical patient labours. The atmosphere even in the middle of summer is more or less moisture laden. The rainfall during the winter months, when the cold makes dryness desirable, is heavy; and taking place as it does for the most part as fine rain, drizzle and mist, the atmosphere is kept during five or six months of the year surcharged with moisture. Damp, cloudy, misty and cold, it is only during the summer months that the climate of the British Isles is tolerable to the invalid, and even then there is nothing to specially recommend it. This is true generally of the whole country, and although there are spots where the invalid takes shelter from the rigour of the climate, these are not to be considered as health resorts of high value to those able to leave the country altogether.

The same may be said of the greater part of Europe,

for although the temperature varies considerably between the cold of Russia and the mild climate of Italy and the South of France, still, speaking generally, with the exception of the high elevations in repute as health resorts, it possesses a humid atmosphere deleterious to the consumptive.

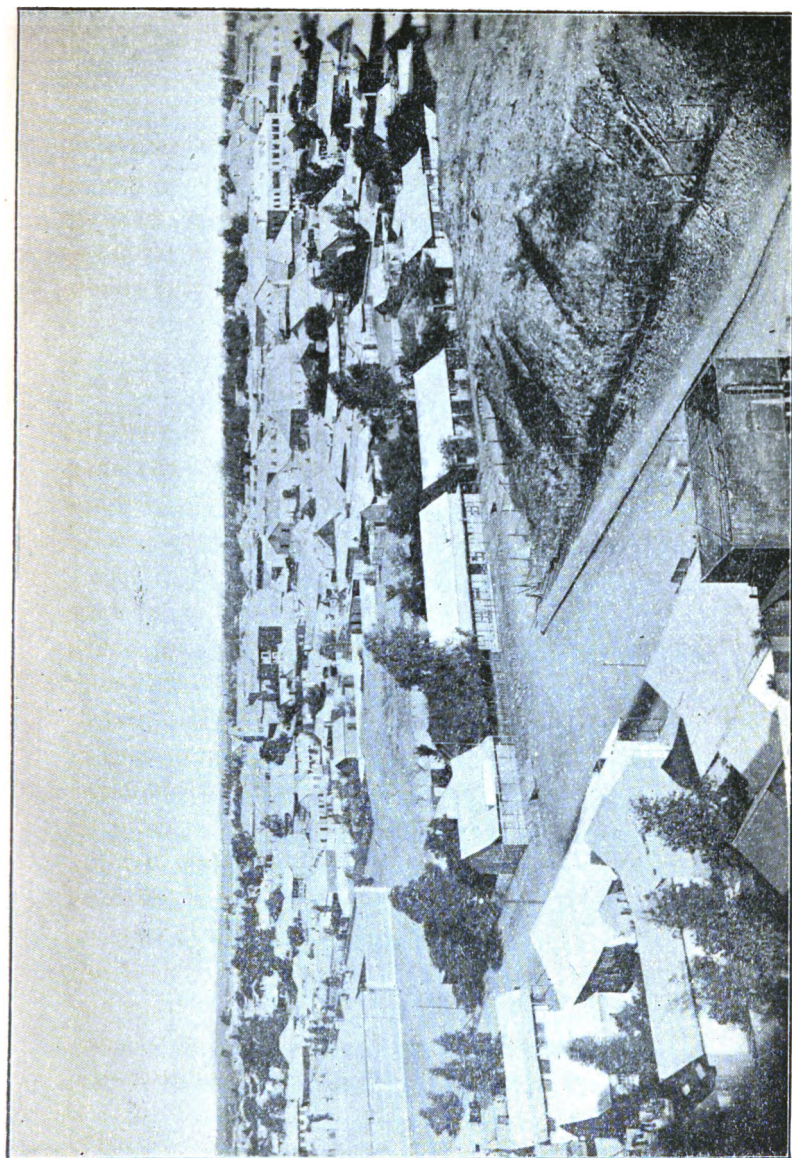
#### SOUTH AFRICA GENERALLY.

If we now turn to South Africa, we find that the climate on the whole is a very much drier one than that of Great Britain or Europe, and meets, perhaps as much as any climate in the world, the recuperative conditions laid down.

With regard to this, I have taken the average humidity of the atmosphere in eight of the South African towns\* without reference to their being specially favourable as health resorts, and find that in 1884, during the whole year, the average humidity of the atmosphere is 66 per cent. These records, however, are taken at 8 a.m., when it need hardly be pointed out that the humidity is greater than at later periods of the day, and, as I have calculated, exceeds the average humidity for the twenty-four hours, in most cases where I can get the necessary details, by 5 or 6 per cent. We may, I think, take the average all-the-year-round humidity of South Africa at 60 per cent. Comparing this with English humidities (in

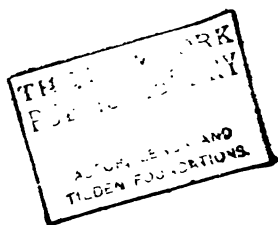
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\* The towns are, Aliwal, Bloemfontein, Cape Town, Cradock, Graaff Reinet, Graham's Town, Queenstown and Ceres.



KIMBERLEY.





which the mean between the maximum and minimum humidity for the twenty-four hours is taken as representing the day. I find that during the three months, June, July, and August, the average humidity is  $5\frac{1}{2}$  per cent., or 9 per cent. above the all-the-year-round humidity of the Colony: while the three English winter months of December, January, and February show a humidity of 12 per cent., or 22 per cent. greater than the average of the Colony. Taking further into consideration that both the autumn and spring in England are damp, wet seasons, we may say that the average humidity of the Colony for all the year round is from 15 per cent. to 21 per cent. less than that of England.

The reader need scarcely be reminded that the seasons of winter and summer are reversed as compared with those parts of the earth north of the equator. The summer months in South Africa, October to March, are in all parts hotter than in England; but although the degree of heat varies much in different localities, it is very hot in some parts that the heat becomes at all unendurable in anything to compare with tropical temperatures.

#### GENERAL CONSIDERATIONS.

Before considering the climate in detail, let us pause for a moment at the general position of the country, which is well known to be due to the very different geographical position.

ing over different areas. Roughly speaking, South of the Zambesi, South Africa is a vast tableland from 3,000 to 5,000 feet above sea-level, and rising more or less abruptly from the coast line. There is always a more or less considerable area which lies between the shore line and the tablelands of too varying a width and configuration to be included in a general description.

One may say, however, that it consists (1) of a fairly well defined level coast belt of uncertain width, but tending to widen as we go northwards, and (2) the broken country forming the sides of the plateau. As a rule within 100 miles of the coast we have passed this region and are 3,000 or 4,000 feet above the sea-level. No matter where we start from, east, west, or south coast, as we penetrate towards the interior we soon begin to ascend, sometimes gradually, at other times winding our way up mountainous terraces until the country spreads out in the flat expanse of elevated tablelands which form three-fourths or more of the whole of South Africa. Following the lines of rail from Cape Town, we traverse some of the most fertile regions in the Colony, a lovely country broken with hills and mountains, and cut up into vineyards, orchards, corn lands and plantations until we reach the Hex River, where we have, although still not much more than 50 or 60 miles from the coast, climbed 1,000 feet. From here on the country changes considerably, and the climb up the Hex River mountains begins, until at

Matjesfontein (another 60 miles by rail) we have reached the edge of the plateau, and are 3,000 feet above sea-level. Starting from Port Elizabeth a similar climb is made until Cradock is reached, also about 3,000 feet above sea-level; while from East London the last terrace of the plateau, which is here somewhat higher, is not attained until we have climbed the Stormberg range and arrived at the little village of Molteno, 5,000 feet up.

From Durban, Natal, from Delagoa Bay, and from Beira the rail makes similar ascents until the high regions are reached. In the southern portions of Africa, more especially that part of the country lying south of, first the Vaal and then the Orange Rivers, including Cape Colony proper, the Orange Free State and Basutoland, the rainfall of the country is largely influenced by the prevalence during nearly six months in the year of the south-east trade winds. These blowing in the direction indicated by their name and laden with moisture, strike the mountainous slopes of the eastern and south-eastern sides of the plateau and contribute to those districts a plentiful rainfall during the summer months. As we get well on the top of the plateau and penetrate westwards the rainfall gradually diminishes until we reach the west coast where rain almost ceases. Glancing at the map and referring to the meteorological reports we find stations on the slopes of the plateau, such as Grahams-town, Stutterheim, and Queenstown, all within 100

miles of the coast, enjoying rainfalls of 29 inches, 32 inches and 27 inches, most of which occur during the summer months. Further west and well on the top of the plateau, Kimberley has 21 inches, Bloemfontein 25 inches, De Aar 16 inches. Still further west Carnarvon has 9 inches, Prieska 11 inches, Upington 8.67 inches, while dropping from the plateau on to the western coast line at Port Nolloth, we have a rainfall of only 1 to 3 inches annually. On the eastern side, the coast belt and the adjoining slopes are usually fertile and well wooded, the character of the vegetation becoming rapidly more tropical as we go northwards from East London. In the high regions, the vegetation varies. As we go northwards from Matjesfontein we get into Karooveld, a small stunted little bush dotted here and there through the dry and shaley soil. In these districts lie some of the best sheep farms in the Colony. Northwards of Beaufort as we follow the rail the karoo bush is replaced by grass veld springing up green and luxuriant after good rains, but usually thin and dry. Through the rainless winter months it becomes dry, sapless and almost white. Only where river spring or well constructed dam give an opportunity for irrigation do we see trees or cultivated lands—the little patch of green in the ocean of drought which denotes homestead.

Westward of Carnarvon, Prieska, and Upington the country becomes more arid, and is not so far opened up by rail or coach service; Namaqua-

land being usually reached by steamer from Cape Town.

#### THE COAST CLIMATE.

The coast climate can hardly be considered as a whole, as it differs considerably. In the Cape Peninsula and neighbouring districts the rainfall varies greatly at different stations; thus at Bishop's Court, near Cape Town, it is 55 inches, at Stellenbosch 29 inches, Paarl 34 inches, Wellington 25 inches; but these variations are due to the situation of these places in relation to the mountains and mountainous ridges into which this part of the country is broken. The whole district is alike from Cape Town to Ceres in having a heavy *winter* rainfall. For instance, at Stellenbosch, from April to September inclusive, 21.5 inches are recorded out of a total fall of 29 inches. Thus as regards the periodicity of their rainfall and humidity, these districts resemble the English climate, and are in strong contrast to most other parts of South Africa. The temperature, however, during these winter months is never very low, and frost is very rare until we begin to climb the mountains. Taking Stellenbosch again as a sample, the coldest month appears to be July, when the average minimum register for the month is 41° F., the maximum 64° F. During summer the range of temperature is never very high, and without wearying the reader further with detail, may be said to rarely exceed 80° to 85° F. in the shade. The net result is that we find this portion

of the Colony about the neighbourhood of the Cape Peninsula possessed of a temperate and fairly dry climate during the summer months, but damp and quite unsuitable for invalids during the winter.

As we go eastwards round the coast we soon lose the influence of the south-west winds which cause the heavy winter rainfall over this area, and a different state of things prevails. The rainfall, at any rate until we get north of East London, instead of being confined principally to the six winter months, is distributed evenly throughout the year. The temperature, winter and summer, is very similar to those already mentioned, tending to rise as we go northwards, and becoming hot and trying during the summer from Natal north. Along the coast south of Natal we have a mild, fairly dry winter, but the summer months are more humid, and therefore slightly less bracing than those of the Cape Peninsula, owing to the frequent prevalence of the south-east winds which, coming moisture-laden direct off the sea, are often very enervating.

On the whole, although the eastern coast towns are much frequented by holiday makers in search of sea breezes during the summer months, they cannot be considered very favourable resorts for consumptives and, as a sea change, are inferior to the Cape Peninsula.

#### THE HIGH PLATEAUX.

But it is not on the coast that we keep our phthisical invalids. Get into the train at Cape Town leaving in

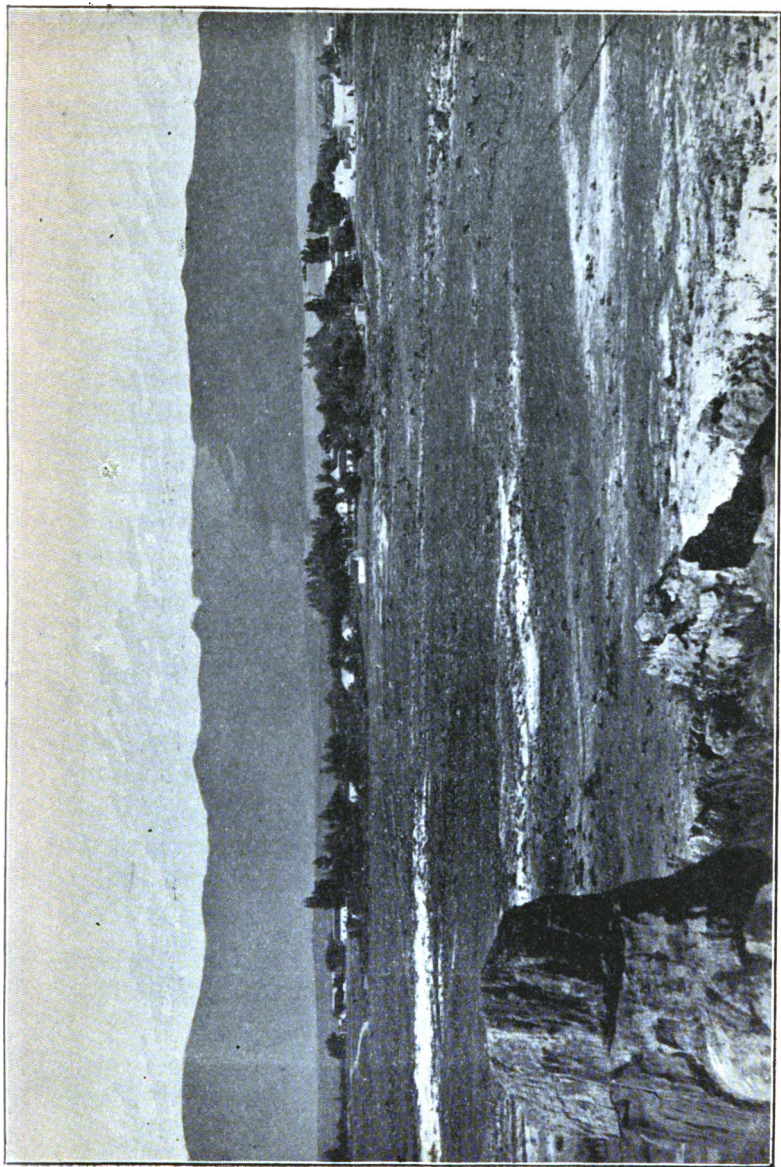
the evening about 9 o'clock, and the following morning you will wake in a different air—buoyant, fresh, and bracing. As the day goes on, the yellow-backed novel you bought over-night will begin to curl at the edges and warp, the lips and skin get dry and parchments, for you have left fog, mist and moisture behind, and are in the dry air of the high plateaux of South Africa. As you look out of the window, woods and vineyards have vanished, and the train rushes along through the vast solitudes of the karoo—a grassless region spreading out in rolling plains, broken here and there by mountainous hills, or kopjes as they are called—almost the only sign of vegetation being the little stunted karoo bush.

Although the physical characters of the country change as we go further north, the climate of the plateau varies little in its different parts, and its main features are similar, at any rate as far north as the Vaal River. Taking the summer months, from October to March inclusive, the rainfall is almost entirely confined to this period. It varies from 10 to 20 inches, tending to increase as we go northwards and eastwards, to diminish southwards and westwards. Such rain falls, not in the misty drizzle of an English “wet day,” but for the most part in heavy showers or thunderstorms which convert the streets into watercourses, and leave us a few hours afterwards in sunshine. The hottest months are November, December, January, February, and if we take a station like Kimberley we

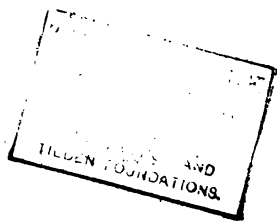


find the average maximum (*i.e.*, the highest recorded temperature of each day averaged for the month) rising as high as 90° to 95° F. during this time. It sounds hot to English ears, and so it is, but the extreme dryness of the air, 40 per cent. to 50 per cent. of moisture, renders it far more tolerable than would be expected. Evaporation from the skin is rapid, and one never feels the clammy perspiration of a hot day in England or at the coast. Although the days are hot, the nights are rarely so, the average minimum for these months rarely reaching above 60° F. And this is an important feature, for heat prolonged into the night is always trying and injurious. On the hottest days the early riser will find the morning air bracing and exhilarating in a way never experienced with the heavy atmosphere of lower levels. Many invalids do not feel our summer heat, and can go through it without a change ; but this is not always the case, and for others some cooler residence is beneficial during one or two months in the year.

From April to September inclusive we have one of the most glorious climates in the world. Although April may still bring a little rain, from this time on we are practically rainless. The air is cold, dry, brisk, and invigorating, while the sun is warm and bright, hardly a cloud in the sky for six months together. During May, June, July night frosts are frequent, and as a rule the air chills suddenly at sundown, a fact to be remembered by the invalid.



CERES.



The average humidity of the atmosphere at 9 a.m. for six winter months at Kimberley in 1896 was 52 per cent. (the humidity of an English winter averages from 75 per cent. to 90 per cent.). As a result of this, the invalid can, and should as far as possible during this season of the year, live out of doors throughout the day.

And I may here say, that this is one of the most important features to be noted and borne in mind. Outdoor life, of which we are hearing a good deal just now in the treatment of phthisis, is of the greatest importance to such cases, and should be equally borne in mind by the idle tourist or those in search of an occupation. As much outdoor life and as free ventilation as possible. The climate of the Karoo, Griqualand West, the Free State, in fact anywhere on the plateau, calls loudly for exercise during these winter months; and is bracing in a sense, and to a degree hardly understood by those who have not experienced it, or something like it. A "champagne air," I think it was Lord Randolph Churchill called it. At the changes of the seasons, and particularly during October, there is sometimes a plague of dust-storms. These will last from one to two or three days, and are sometimes terrific. They must be avoided by remaining indoors as much as possible.

#### THE SLOPES OF THE PLATEAU.

Between the coast and the higher parts there is a considerable area which lies on the edge or sides of the plateau, and many towns and districts in this

region have an excellent climate, if not quite so dry as the one I have been describing. Along the eastern edge, as I have said, rain falls more abundantly during the **summer months** than in the higher regions, and the result is that these districts are much cooler at this season of the year. Thus, at Grahamstown, 1,800 feet above sea-level, the average maximum for the hottest four months in 1896 was 78° F., but the humidity was much higher; Stutterheim, 2,740 feet, was 74° F. for the same period. As we go north-east towards Basutoland we get to the edge of the Stormberg range, and at such places as Dordrecht and Barkley East, a much cooler summer climate is experienced in a beautiful and mountainous country. In the latter places the winter is piercingly cold, and not to be recommended for invalids; but the summer months form a delightful change from the hotter parts, and it is a pity that we cannot boast a good sanatorium in any of these regions. As we get into Basutoland, we are in one of the boldest and loveliest parts of South Africa, where the edge of the plateau is broken up into high mountain ranges and peaks, some nearly 10,000 feet above sea-level. It is a beautiful, well-watered country, with a considerable rainfall, but unfortunately only accessible by cart or travelling waggon over very bad roads. Being also a native reserve, accommodation is extremely limited. Were it not for this many parts would form an ideal summer change from the hotter portions of the country.

## SUITABLE LOCALITIES FOR PHTHISIS PATIENTS.

~~We can now pass to the more particular description of a few of the districts and towns specially to be recommended, or in common use as health resorts ; and if many places are little dwelt on or omitted, it is only because they are perhaps slightly less healthy or less easily accessible than those to be mentioned, or offer fewer attractions to the invalid ; and while this preference be given to certain places, it must not be forgotten that South Africa generally is of the greatest value to the consumptive.~~

It is not too much to say that the Colony is peopled in its every part with a certain small contingent of those who, unable to stand the English climate, with its cold damp winters, owing to already developed or threatened symptoms of consumption, have come out to the Colony, and finding they can live in comparative comfort, have settled down to regular employment. The professions show numerous examples of such men, as does also nearly every branch of industry, and the fact that a large number of these previous invalids are able to live in comparative comfort for years, earning their own living, is one of the strongest proofs of the efficacy of the climate.

Of course, with a disease like phthisis, it need hardly be said that in many cases life is merely prolonged, and that in some no benefit at all accrues to the sufferer. These latter are indeed only too numerous a class, for the simple reason that the

search for health is undertaken at a late stage of the disease when its cure, or even its arrest, is impossible. In some of the more rapid forms of consumption, cure is, it is true, from the first hopeless, but the writer has no hesitation in saying that out of the many patients who seek relief in the South African climate, and who come out at an early stage of the disease, very few gain no benefit at all; a goodly proportion have their life prolonged, and live in greater comfort in the dry sunny air than they could at least in Northern Europe, while a not inconsiderable number, especially of those who come out when symptoms are first threatening, make a thorough recovery.

#### CAPE TOWN AND ITS SUBURBS.

To commence with, Cape Town is the first port by which the stranger reaches the Colony, and is the best one, as a rule, for health-seekers to book to. For one thing, it is the only port in which he can always land direct from the steamer on to the quay. The town itself is situated at the foot of Table Mountain, which rises an almost sheer perpendicular behind it. The population numbers from thirty to forty thousand, and includes contingents of Malays, natives, and half-castes. It is not a particularly well-built town, and has nothing very striking about it, either favourable or the reverse. The pleasantest part is that known as the Gardens, and lies on the Table Mountain side. It consists of a considerable number of private resi-

dences and a few good hotels, with almost no shops. It is by far the pleasantest spot to select for those intending to reside in Cape Town itself. As a rule, however, the residences of the better class business community are situated outside of Cape Town, and form a string of scattered villages running into one another, and placed along a line of rail which connects Cape Town with Kalk Bay, a small watering-place situated on the south side of the isthmus which separates it from Table Bay. Kalk Bay itself is much frequented during the summer months by the Cape Town people, and makes a pleasant change for those requiring a little sea air away from the dust of Cape Town. The distance to it is only sixteen miles.

The other villages—of which the principal are Mowbray, Rondebosch, Claremont, and Wynberg—all lie at the foot of a mountain-range, the wooded slopes of which, meeting the more regular avenues of oak and fir which line for the most part the public and private roads all through this neighbourhood, make these suburbs the most delightful residences imaginable; and no one could wish to find a country affording pleasanter opportunities for riding, driving, climbing, and picnics. A fair number of hotels and accommodation houses are also to be found here, the best being at Wynberg and Sea Point.

The climate of this portion of the Colony is fairly dry and available for the invalid during the *Midsummer*



*months*—from the end of October to the beginning of March. The heat is moderate (the average maximum of Wynberg for the two hottest months in the year being  $80^{\circ}$  and  $75^{\circ}$  respectively), and the air dry and pure.

Cape Town itself is not to be recommended; the south-east winds, which blow very strongly through the summer months, make the town dusty and disagreeable through the day, and the nights are sometimes unpleasantly warm from the reflected heat of Table Mountain.

The suburbs, however, before mentioned escape most of these inconveniences; the nights are never hot, and the south-easters (though sometimes rather strong) are very seldom sufficiently felt to be unpleasant or injurious.

It is admitted that the neighbourhood of Cape Town cannot be as strongly recommended as some of the up-country health resorts, which have the additional advantages of high elevation and increased dryness of atmosphere. On the first arrival, however, of a patient during the months referred to, he runs no risk by a short stay in the Cape Town suburbs, which he may prolong as he finds it suits him; but he must hasten away before the winter rains set in, and he must bear in mind that, if he would secure permanent advantage under the best conditions, he will do well not to tarry anywhere on the coast, but to establish his quarters up-country with as little delay as may be. There can

be no objection, however, for those who have greatly benefited by a change up-country, to get a change to the suburbs of Cape Town, or other seaport towns, in the summer months. It relieves the tedium of an up-country residence, particularly to those who do not ride or shoot, and is an agreeable and safe change, supplying the varied social advantages of a more civilised community.\* For such a change the neighbourhood of Cape Town is undoubtedly preferable to any other seaport, as comparatively little rain falls from November to March, while the eastern ports get their rains in the summer. It may be noted that very many delicate persons whose business compels them to remain near Cape Town, find it suits them fairly well, and much better than a European climate. The writer has known many such who have held their ground for years, where life would have been impossible in England.

If patients are obliged to remain in Cape Town through the winter, the rain-damps will be avoided by a residence at Sea Point, about two miles westward of Cape Town, which is much drier in the winter than the rich-foliaged suburbs on the other side of Table Mountain. There is sea-fishing from the rocks, and beautiful walks along a singularly bold and picturesque coast.

The winter months, however, in the whole district

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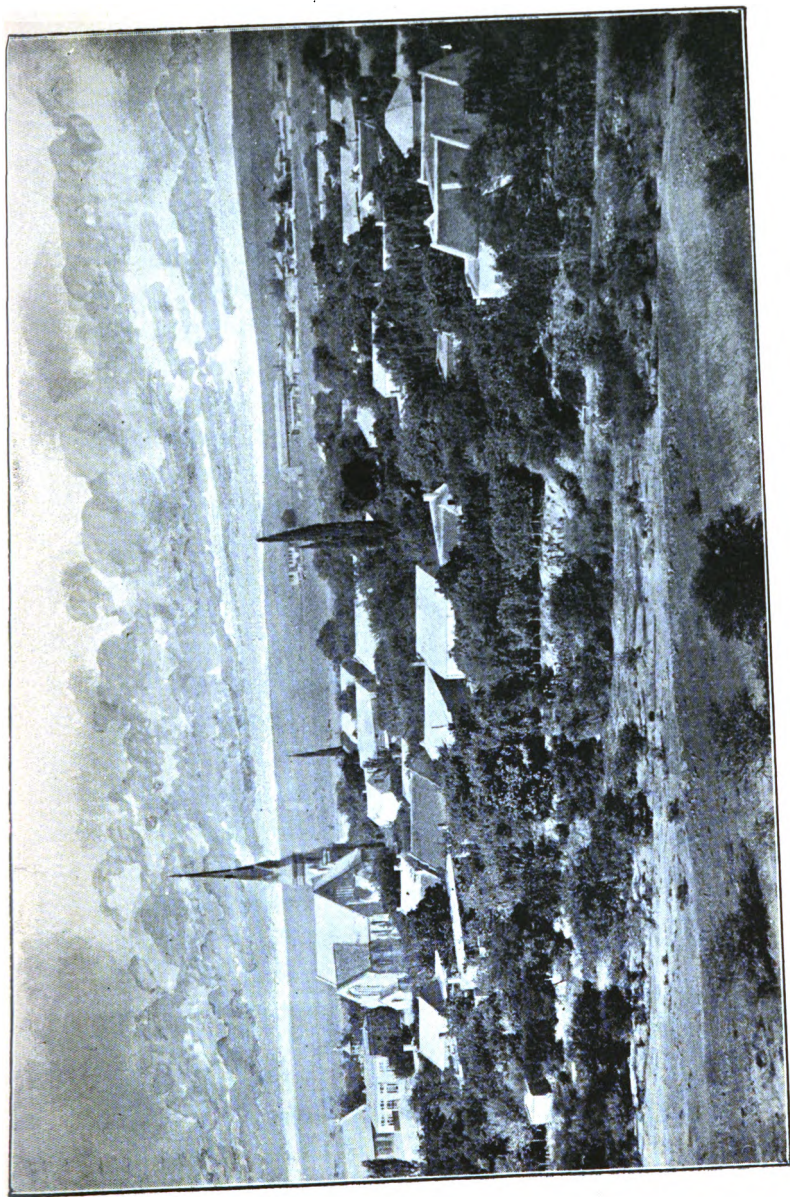
\* With more experience I have felt obliged to slightly modify this advice. See p. 76.

are not nearly so suitable for invalids as the summer. The weather is not cold, the thermometer rarely going below freezing point, but there is a good deal of rain, and the atmosphere is much more laden with moisture than in the up-country districts. Fogs and mists are not infrequent, and patients are strongly advised, if possible, even if they find the summer climate agree, to change their residence during the winter.

#### OTHER COAST TOWNS.

The other coast towns may be shortly alluded to : they are—I. Mossel Bay, which is a somewhat dreary place, with very little to recommend it, except as the port of a beautiful back country, inaccessible, however, by rail. 2. Port Elizabeth is a large and important colonial town, about thirty hours' journey by boat, and about forty-four by rail (which takes a long détour) from Cape Town.

Being such a large business town it would be pleasant also to regard it as a health resort ; but although some invalids who have come out, and have become tied there by business connections, have to a greater or less extent benefited by the change, still it cannot be regarded in nearly so favourable a light as many other places, being certainly inferior to the general run of inland colonial towns, and from a chest point of view, of other coast ports. It is built on the side of a hill rising almost directly from the sea coast, and is as



BEAUFORT WEST

THE  
PUBLIC  
ASTOR, LENOX AND  
TILDEN FOUNDATIONS

well found in hotels, &c., as any town in South Africa.

The mean humidity of the atmosphere is 75 per cent. at 8 a.m., and is remarkably constant during both summer and winter months. The temperature also varies comparatively slightly during the year, the lowest recorded average maximum for one month being 65° and the highest 76°. The average minimum for one month never registered below 40°. It will be seen from this that as far as temperature goes the climate is equable, but the winds are boisterous and trying to a degree, and the summer south-easter brings a moist, enervating atmosphere from the sea most trying to an invalid.

Further up the coast we come upon Port Alfred and East London, the former the smaller and less important town of the two. East London, twelve hours by boat from Port Elizabeth, is built on both sides of the mouth of the Buffalo River, where good boating can be had; the neighbourhood in many parts is extremely pretty, though the town itself is not picturesque.

Almost the same remarks may be made with reference to its climate as were made about Port Elizabeth. The winters are mild and clear, and the summers not hot; the air is moister than that of most of the inland towns, and though making a pleasant seaside change, it cannot be specially recommended as a permanent residence for invalids.

I may add, however, that a resident writes me very strongly as to the beneficial effects of a residence just outside this town, where he gets an elevation of 200 to 300 feet above the sea, he himself having derived the greatest benefit from it.

Having shortly mentioned most of the coast ports, I propose now to take you back to the Western Province, and introduce you to the village and district of Ceres, which I shall speak of rather fully, as it has been much extolled as a health resort by those who have tried it, and I must mention that for the account here given, I am indebted almost entirely to Dr. Zahn, a medical practitioner of old standing and reputation in the district.

#### CERES.

The village of Ceres is easily accessible from Cape Town, being only 84 miles by rail. Ceres Road is the nearest station, and there is here an hotel from which conveyances may be obtained to Ceres, which is only 10 miles distant.

It is situated about 1,700 feet above sea-level, in the midst of the most delightful mountain scenery, and has nearly all the attractions, including sanitary conveniences, that an ordinary traveller or invalid might expect to find in a small European township. It is well laid out, the streets being broad, cutting one another at right angles, and lined on both sides with beautiful oak trees. The Duars River, after passing through Mitchell's Pass, flows through the centre of

the town, affording very secluded and well-protected bathing places at convenient distances.

The soil is sandy, mixed with boulders here and there, with occasional rocks of sandstone penetrating the surface. The subsoil is principally composed of yellow clay, and there is a marked absence of stagnant pools of water owing to the rapidity with which the river runs from a high to a low elevation, carrying with it in its course all decayed vegetable matter and other objectionable substances likely by their presence and exposure to be detrimental to the health of the inhabitants. In fact, the general sanitary condition of the town is good. There are boarding houses and hotels in the town where invalids and travellers will find good accommodation.

At two hours' drive from Ceres an elevated plateau is reached of 2,700 feet above sea-level, where a most beautiful and dry climate may be had during the winter; and here are some of the finest farms for horse-breeding, cattle, and sheep to be found in the Western Province. Ceres was first recommended as a health resort by the late Dr. Leach, especially for patients afflicted with chest diseases. He says: "It is worth while for patients to remain at Ceres, and try it for some time before proceeding to the still higher elevated portions of South Africa, as that might save them the inconvenience of a long and tedious journey."

At the beginning of 1895 it was again highly



recommended by Dr. W. T. Hertz in the "Hamburger Zeitung," who had previously resided at Ceres for some time suffering from phthisis, and who was compelled to leave the place to fulfil an engagement at Madeira. His opinion, as he expressed it, is to the effect that Ceres, as a suitable place for lung diseases, had not been sufficiently appreciated. He had been visiting several highly recommended health resorts in different parts of Europe, but had never met, he says, with a more delightful and suitable climate than that of Ceres.

The average maximum temperature for the hottest six months in the year 1884 was  $75^{\circ}$ , and the hottest month only reached  $84^{\circ}$ . The average minimum or lowest night temperature for the same six months reached  $50^{\circ}$ , the highest recorded average for one month being  $55^{\circ}$  and the lowest  $45^{\circ}$ . The mean 9 a.m. humidity for these months is 61 per cent. It will thus be seen that the previous statements as to the dryness of the atmosphere are fully borne out by these observations. The heat, it will be also seen, is not excessive, and the hottest days are easily bearable on account of the gentle westerly breezes, which generally spring up about 11 a.m. and last until sundown. The nights are delightfully cool and bracing, and the air being dry the invalid is enabled to sleep with open windows, a most desirable course to pursue when the climate permits it.

During the six colder months of the year the average

maximum temperature is  $62^{\circ}$ , while the average minimum for the same period is  $38.5^{\circ}$ , the coldest month being July, when this latter record was  $31^{\circ}$ . The average 9 a.m. humidity during these months is 82 per cent.

It will be seen, therefore, that the winter months at Ceres are not so favourable as the summer, and are not, in the writer's opinion, nearly as good as other parts of South Africa, such as Cradock and the Orange Free State.

On the whole, invalids not desiring to travel far are advised that in the summer months, October to March, it is worth while to try Ceres, and those unable to afford the luxury of a yearly change may, with care, during the winter months obtain great benefit from a permanent residence in this little town. In another way, by its easy access from Cape Town, it makes a pleasant and safe halting place for those arriving by steamer and wishing for a rest before going on to the higher elevations of the Free State. Dr. Zahn adds an interesting fact which I omitted to mention—viz., that during twelve years' residence in Ceres district, he has only registered five deaths from consumption, excluding imported cases, and three of these occurred in the same family. There is a sanatorium and one or two good hotels in the town.

Caledon is situated on the southern slopes of a range of mountains which runs eastward along the coast from Sir Lowry's Pass. It is easily reached from

Cape Town by taking the train to Sir Lowry's Pass Station, about two hours' journey, and travelling thence by passenger cart a distance of about five hours over the Pass and through some very pretty scenery. The village of Caledon is about 960 feet above sea-level, with the mountains behind it and a gentle slope in front towards the sea, from which it is some ten or twelve miles distant. Its hot ferruginous springs have a well-deserved reputation in the treatment of chronic rheumatic affections, and the sanatorium built in connection with these springs is a commodious and comfortable institution in every way well appointed and up to date. The sanatorium is about a mile from the village somewhat higher up the mountain slope. The village itself is prettily situated, though somewhat quiet, and possesses a fairly good hotel. The altitude gives it an advantage in point of climate over many of the coast towns, and in the summer time invalids with chest complaints may spend a week or two here with profit and enjoyment. In the winter months, from April or May to October or November, the climate is damp and often chilly, and it could not be recommended as a health resort except for those specially desiring the bath treatment on account of rheumatic affections.

#### OTHER WESTERN PROVINCE TOWNS.

Of the other Western Province towns may be mentioned, as all good during the summer months,

Tulbagh, a short distance down the line, and Worcester, still further inland. Both are pleasant towns with picturesque surroundings, the latter more especially so. They are within easy reach by rail of Cape Town and suitable centres from which to make walking and mountaineering excursions during the early summer months.

Malmesbury, too, from its bracing situation, is a suitable inland change from Cape Town. But with all of these places it must be noted that the winter rainfall is heavy, and the winter moisture correspondingly considerable.

Matjesfontein (2,970 feet above sea-level) is one of the first stations of any importance we come to after we have climbed the Hex River mountains and reached the Karoo plateau. It is not a town or even a village, but being the headquarters of the energetic refreshment contractor of the Cape Government Railways is provided with a comfortable hotel which forms a pleasant halting place to those anxious to break the long journey north. Being also within ten or twelve hours' journey of Cape Town, it forms a convenient and comfortable change from that place.

Beaufort West, 2,792 feet above sea-level, is a little town some distance further north on the plateau and in the middle of the Karoo veldt. The climate is similar to that described as characteristic of the karoo generally and, in fact, of the greater part of these high regions south of the Vaal and Orange Rivers. It has a smaller rainfall than many parts,

only registering nine inches in 1896 (a very dry year). This falls almost entirely through the summer months, leaving the winters exceedingly dry, cold, and invigorating.

In the immediate neighbourhood of Beaufort West is a sanatorium or hotel which deserves a word of mention. The proprietor writes me :—

“ This is a place more adapted for the robuster invalids and is conducted more as a country house than as an hotel. It stands on its own farm facing almost due south and is sheltered on the north by the Nieuwveldt Hills. It is supplied with pure, clear water from the spring or “ fontein ” above the hotel. The apartments are large and lofty, the building is of only one story, there is a billiard room, and private sitting rooms can be had. The distance is nearly five miles, or forty minutes’ drive, over a good road up a gentle incline from Beaufort West Railway Station. Fresh butter and milk are supplied in abundance. A liberal table is kept and a choice cellar of wines. There is daily communication by Cape cart with the village, railway station, and post office.

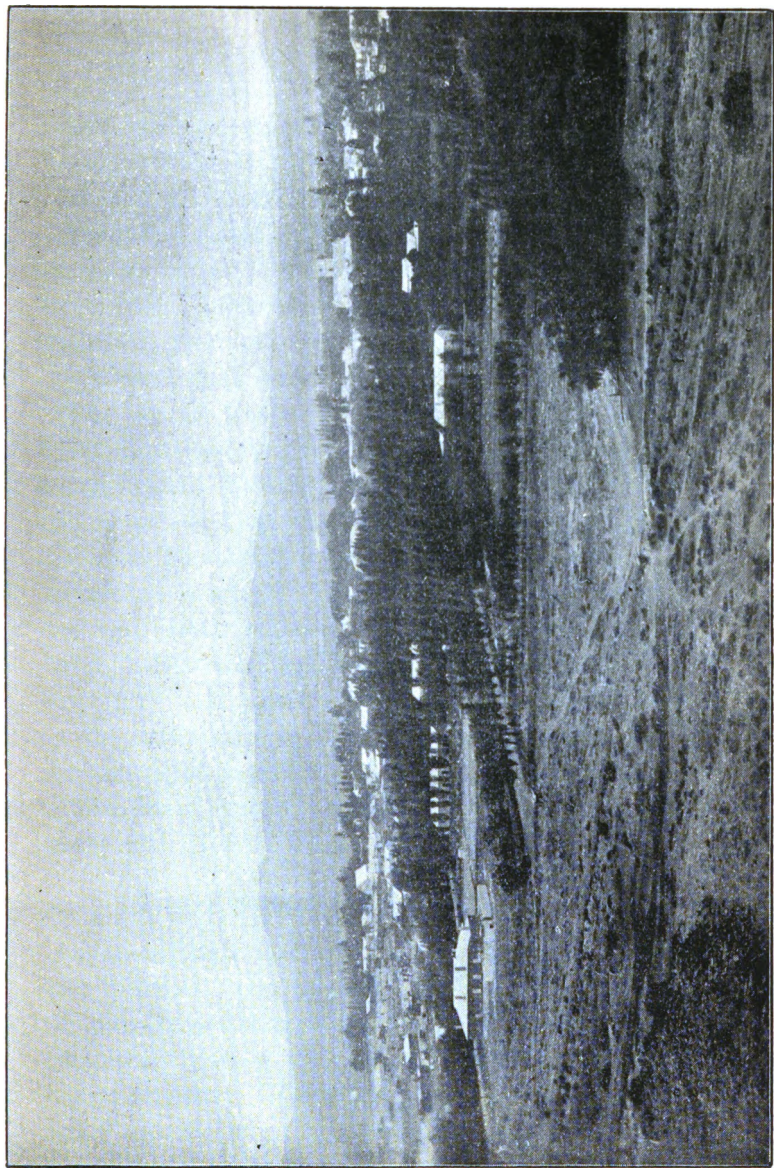
“ The terms are :—

£10 per month ;

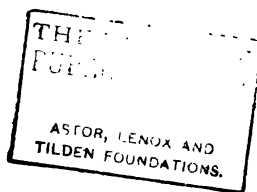
£2 . 10s. per week ;

10s. per day.

“ Conveyances and saddle horses can be obtained at a moderate cost. To ensure rooms, visitors from England would do well to write at least two mails



MIDDELBURG.



before sailing. Apply to P. M. Hill, Lemoenfontein, Beaufort West, Cape Colony. Telegraphic address :— ‘ Lemoen, Beaufort West.’ ”

Wagner's Kraal is the name of another sanatorium for the reception of invalids, situated about an hour's drive from Nelspoort, a station some thirty miles north of Beaufort West. I have heard excellent accounts of this establishment.

The whole Karoo plateau, from the top of Hex River Mountain on the western line, extending northwards beyond Beaufort, and eastwards to Middelburg and Somerset East, has a fine, dry climate, possessing the most favourable features, namely, a summer with its rainfall mostly contributed by thunderstorms, giving rise to a moisture which is rapidly dispersed, and a clear, brisk, cold and sunny winter, comparatively free from rain; and I may further direct attention to the circumstance that there is a farm at an elevated spot near the town of Prince Albert, which will be found on the map, where patients are received under the care of Dr. Mearns, of Prince Albert.

#### THE EASTERN PROVINCE GENERALLY.

Glancing now at the Eastern Province inland towns and districts, and as has already been mentioned, the climate has this peculiarity, that the rainfall occurs principally during the summer months instead of the winter months. The following table clearly indicates this characteristic, the rainfalls mentioned being taken



in each case, except that of Cradock, from an average extending over several years :—

| NAME OF TOWN.        | SUMMER<br>RAINFALL. | WINTER<br>RAINFALL. | TOTAL.  |
|----------------------|---------------------|---------------------|---------|
| Graaff Reinet .. ..  | 10 in.              | 4½ in.              | 14½ in. |
| Colesberg .. ..      | 8½ "                | 4½ "                | 13½ "   |
| Queenstown .. ..     | 16 "                | 4½ "                | 20½ "   |
| Aliwal North .. ..   | 19 "                | 5 "                 | 24 "    |
| Graham's Town .. ..  | 18 "                | 11 "                | 29 "    |
| Cradock .. ..        | 6 "                 | 3 "                 | 9 "     |
| Mean of Six Towns .. | 12·9 "              | 5·4 "               | 18·3 "  |

The effect of this is of course to make the winters, which vary as to temperature in different parts, always comparatively dry, and the reverse of what is found in most countries.

The summer moisture is not unpleasantly great, and shows in the above towns an average of 10 to 12 per cent. humidity less than in an English summer, while the winter humidities show at least 20 to 25 per cent. less than those of England, and in many places even a greater difference is observable.

#### GRAHAMSTOWN.

To consider the towns more in detail, we may begin then with Grahamstown—a very pretty and very English town, easily accessible, at a distance of about 100 miles by rail from Port Elizabeth. It has a

population of about 8,000 inhabitants, and lies at an elevation of 1,700 feet above sea-level, in the midst of one of the greenest parts of South Africa. The surrounding country contains the most beautiful scenery and forms one of the principal ostrich farming districts in the Colony. The accommodation for travellers and invalids is good, and the climate of the usual characteristics of Eastern Province towns. It is, however, damper than some of the others, and its position, surrounded by hills, while conferring upon it some advantages in the way of protection from winds, &c., contributes somewhat to this fact. The high rainfall (29 inches) which it enjoys, while rendering the surrounding country green and beautiful, also brings its disadvantage in the way of moisture. Its average humidity is 71 per cent. taken at 9 a.m., and varies little during the winter and summer months.

Graham's Town is also connected by rail with Port Alfred, a small seaport town only 42 miles distant by rail, where the sea air and beautiful scenery may be enjoyed.

The summer months are not as hot as in some other districts, the average maximum for the hottest month in 1884 not reaching above 80°.

On the whole, we may put it down as a very good health resort, its social conditions, surroundings and accommodation being specially good. Its all-the-year-round climate, however, is inferior for invalids to that of the higher regions.

**GRAAFF REINET.**

Graaff Reinet is another Eastern Province town, connected by rail with Port Elizabeth, from which it is distant 185 miles. It is situated in a valley of the Sneeuwbergen range of mountains, and is an extremely pretty and picturesque town. Its climate is a very good one; though hot in summer, the atmosphere is extremely dry, and the winters are moderately cold and very bracing. Its average humidity for the year is very low, being only 63 per cent., and the town may be commended to invalids as an excellent health resort, except in the hottest months of the year.

**CRADOCK.**

On the main line of rail from Port Elizabeth to Kimberley, about 180 miles from the former place, we come upon one of the best health resorts in South Africa. The Cradock district, to which we refer, is an elevated plateau about 3,000 feet above sea-level, situated to the north of the Winterberg range of mountains. The district is not as well wooded as many other parts of the Colony, and there is no green grass such as is to be found in the Grahamstown neighbourhood. It is, however, an excellent sheep-farming country, being probably one of the best in the Colony. The town is situated on the Great Fish River, has 2,000 inhabitants, is well laid out, and has almost everything that could be desired from a sanitary point of view. It has many English residents,

and is well provided with accommodation houses both for the invalid and travellers. With regard to its climate, the average maximum for the hottest six months of the year is somewhat high, reaching  $84^{\circ}$ , the average minimum, however, for the same six months being only  $51^{\circ}$ . The rainfall is very small, but occurs principally in thunder showers through the summer. The humidity (8 a.m.) during these months is 62 per cent. It will be seen from this that the summer climate is very hot, the average maximum for the warmest month being  $91^{\circ}$ . It will be noticed, however, that the minimum temperatures are very low, showing the nights to be cool and bracing, and enabling the invalid to enjoy refreshing sleep after the heat of the day. The humidity also being so low (it must be remembered that the one quoted is an 8 a.m. record, and therefore above the average for the twenty-four hours), the dryness of the atmosphere enables the heat to be borne more easily than a much lower temperature would be if the atmosphere were moister.

In the colder months of the year the temperature is considerably lower; it is nearly always, however, warm in the daytime, though often sinking below freezing point at night. The humidity during the winter months is almost the same as the summer.

The efficacy of the climate in pulmonary diseases is well known and appreciated throughout the Colony, and its easy access by rail from Port Elizabeth makes

it a frequent resort for invalids. Dr. Fehrsen, who has for twelve years enjoyed a very considerable reputation in Cradock, writes me as follows :—"Asthma is unknown here and so is phthisis, except what is imported, and numbers have had their health completely restored. I consider the winter months the best. The advantages of the town are: easy access from Port Elizabeth, good society (purely English), and good accommodation; the climate as dry as any part of the Colony." This is, indeed, no over-statement of facts, and only bears out what is printed in nearly every work on South Africa. Not only is the town healthy, but residence on the farms in the district is equally beneficial and cannot be too strongly recommended.

#### MIDDELBURG.

A town with about 2,000 inhabitants, situated on the newly opened line of railway between Graaff Reinet and Rosmead Junction. It is about 4,000 feet above sea-level, and boasts of all the advantages claimed by other up-country places. There are one or two good hotels and a sanatorium with limited accommodation situated on the outskirts of the town. The proprietor of the sanatorium writes me that his terms are £10 . 10s. per month, and that he is able to send patients during the summer months to a farm he has in an adjoining neighbourhood where the elevation is over 5,000 feet, and the heat in summer is much less than at lower levels.

Tarkastad is a small town with a comfortable hotel situated half way between Queenstown and Cradock. It has all the advantages claimed for other places, and one or two patients who have visited it claim a preference for it on the ground that the heat during the summer is less trying than elsewhere.

#### OTHER EASTERN PROVINCE TOWNS.

Going further east, and connected with the port of East London by rail, are King William's Town, 40 miles, Queenstown, 154 miles, and Aliwal North, about 280 miles from East London. All these towns are health resorts of the same class as Grahams-town—the two latter, Queenstown and Aliwal, having the best and driest climate ; the former, King William's Town, having a few compensating advantages in the way of accessibility and social advancement. They may all be used as centres in a trip through the Colony for exploring some of its grandest neighbourhoods, more especially that of Queenstown.

As places of residence, they are also of considerable value in the treatment of phthisis, and only inferior in their all-the-year-round climate to the higher districts of the plateau.

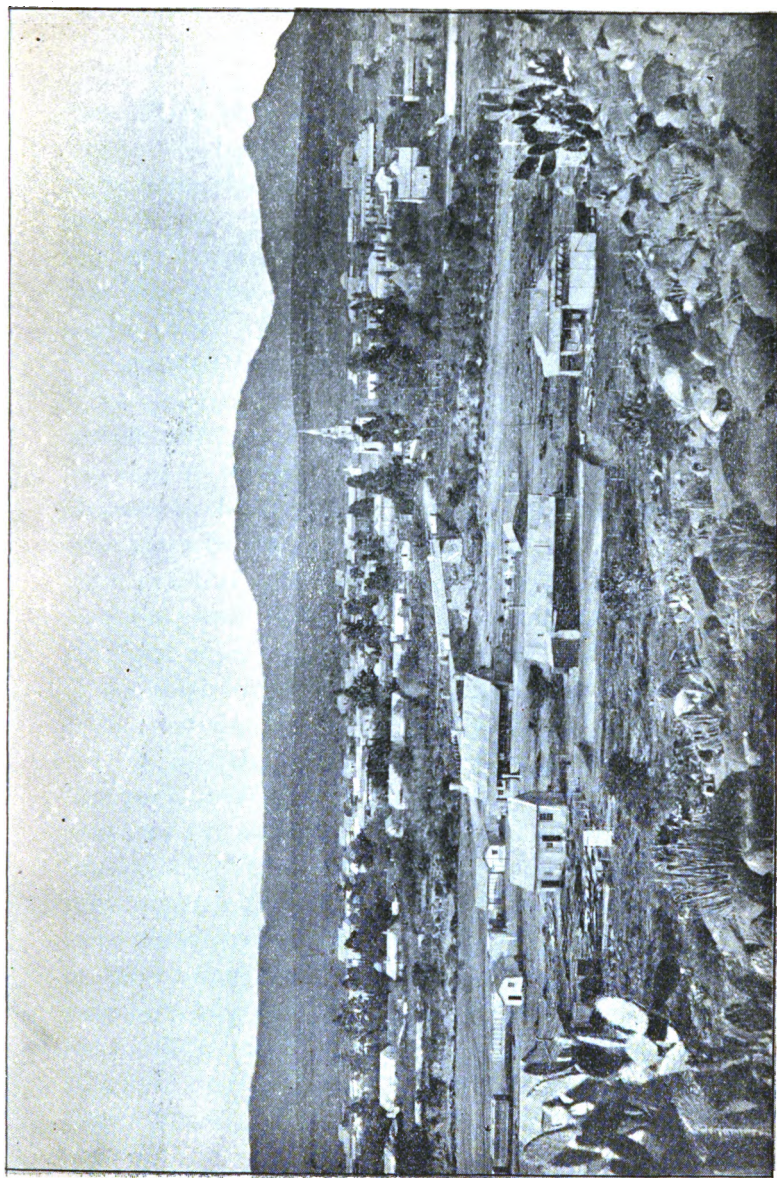
There are many other towns, both in the Eastern and Western Provinces of the Colony, quite up to the climatic standard of most of these mentioned ; it would, however, be beside the purposes of this work to describe each of them in detail. Having warned the health-seeker against the coast towns (with the

exception of the neighbourhood of Cape Town) as being less suitable in most cases for permanent residence than the inland places, I feel there is no further warning to be given. Some places are better than others, and with the exception of the particularly noted portions of the Western Province, I think, on the whole, the Eastern Districts are the best ; but it may be taken for granted that the Cape Colony generally is beneficial, and those parts specially mentioned are so, principally because of their accessibility or social features.

#### KIMBERLEY.

Kimberley, the "Diamond city," is one of the most interesting towns in the colony. Its industry is diamond mining. Originally a patch of barren veld, later a straggling camp of iron and canvas grouped around the mines, it is now one of the most prosperous towns in South Africa. The whole machinery for the collection of the much-prized little bits of carbon is well worth a visit, and not the least interesting sights are the huge compounds in which the natives who work in the mines are housed. Kimberley is situated in the division of Griqualand West, just on the border of the Free State, and of late years its iron and wood have given place to substantial brick buildings surrounded by pretty gardens, which give an air of permanency it never before possessed.

In the earlier editions of this work I have hesitated to say much of it as a health resort ; its dust and its



CRADOCK.



ACQUISITION  
TILDEN FOUNDATION

discomforts were such as hardly to make it desirable for invalids, but it has greatly improved, and has now many attractions which recommend it to the invalid and tourist. It has one of the best clubs, one of the best libraries, one of the best theatres, and now the best sanatorium in South Africa. The latter needs a word of description.

It stands about a mile from the centre of Kimberley on an elevated ridge which overlooks the small sister township of Beaconsfield, and beyond the view spreads out into a waving expanse of veld, limited in the distance by the blue line of hills or kopjes just over the Free State border. A well-chosen site, away from all dust and traffic, but easily accessible by tram or cab from the town. It is a large two-storied building faced on three sides with a broad balcony, and although of no great architectural pretensions, has been built throughout with every regard to solid comfort.

It is practically a gift to the town by the De Beers Company, and no expense has been spared (it cost between £20,000 and £30,000) to make it really comfortable. It is controlled by a committee of townsmen nominated by Mr. Rhodes, and can hardly be said to be run on commercial lines, but with a view of giving to the country what medical men and health-seekers have for a long time clamoured for—a first-class hotel for invalids. It is not intended for the reception of advanced cases of disease, and is in fact much used by stray visitors and “parties”—serious cases requiring

nursing being removed to the hospital, where private rooms and nursing comforts are obtainable. Although it has only been open some six months as I now write, it has already attracted a number of visitors who speak highly of its excellent management and solid comforts. The sanatorium is not cheap, charges varying from 15s. to £1 per day, including everything but wines, and many health-seekers will be unable to afford its luxuries. There are besides many good hotels in the town, and living generally, though dearer than at the coast, is not very costly. Its climate is that described as typical of the high plateau districts, and it has many social and other advantages not possessed by smaller places. The climate of Kimberley and the district of Griqualand West so exactly resemble those of the neighbouring Free State, which are elsewhere fully analysed, that it is unnecessary to give here a fuller account of them.

#### ORANGE FREE STATE.

The Orange Free State is the little republic lying north of the Orange River, and between it and the Vaal.

Without going into its history, I may mention to those ignorant of the fact that it is essentially the home of the Dutch Boer, and under a Dutch Government. In spite of this fact, however, there are very few towns in the country without a contingent, more or less considerable, of English. The business of the country, in fact, is done by the English almost entirely;

and the towns, being of course the business centres of the districts in which they are situated, always contain a social English element. Not that the English and Dutch do not mix socially with mutual advantage—that would be an undesirable and impossible state of things—but I only mention the presence of the English portion of the community to prevent the impression that people might have, not knowing anything about the country, that they were going to a place where they would find little in common with the people with whom they had to live.

As already mentioned, the Free State is situated between the Orange and Vaal Rivers. It is not picturesque, for the most part consisting of long, rolling plains of grass land, or veld, as it is called, dotted here and there with small hills, and except in a few localities, almost devoid of trees. It is an elevated plateau, lying from 4,000 to 5,000 feet above the sea-level, and possesses a remarkably dry climate specially suitable to consumptive invalids. The only meteorological observations I have been able to obtain are those kindly furnished to me by Mr. Brebner, the Superintendent of Education at Bloemfontein, and it is to be deplored that observations as valuable as those he has furnished me with are not obtainable from other parts of the Free State. Speaking of the Free State generally, then, the special features of the climate—its great dryness, and altitude 4,000 to 5,000 feet, and its sparsity of population—are those which

recommend it most to the consumptive invalid. As in some portions of the colony already alluded to, rain falls principally during the thunderstorms which occur at frequent intervals through the summer months, and this has the effect already mentioned of conferring on the winter months the dryness which in cold weather is so essential to health, without rendering the summer air permanently humid, owing to the rapidity of the downfall.

Every climate has its drawbacks, and the Free State has one, if only one, in its occasional fierce dust-storms. If these were of very frequent occurrence or long duration, they would undoubtedly be injurious to consumptive invalids; fortunately, however, they as a rule last only a few hours, and those lasting for a whole day or longer are of very unfrequent occurrence. While they last they are very disagreeable, and invalids should always remain indoors, for in addition to being unpleasant, the inhaled fine particles of dust are undoubtedly harmful to the lungs of the patient. But when we have spoken of these dust-storms there is nothing more to add unfavourable to the climate as far as the invalid is concerned, and they are of little consequence as they do not confine him to the house for any length of time, as is the case with the Cape south-easter, which has its headquarters at Cape Town, and holds forth in full fury for days together.

Taking the Bloemfontein observations as the nearest we can get to those which would be representative of

the Orange Free State generally, we find that during the six hottest months of the year the average maximum temperature is  $82^{\circ}$ , the average minimum for the same period being  $55^{\circ}$ , and the highest for one month being  $60^{\circ}$ ; the humidity during these months registered 55 per cent. as an average.

The heat of summer therefore is considerable, but perfectly tolerable with the dry atmosphere; the nights are deliciously balmy, and enable the invalid to sleep with doors and windows open during the night, or even to sleep altogether in the open air. This is of the greatest advantage to the invalid, who, above all things, requires as much pure air as he can get. The dryness of the atmosphere—humidity 55 per cent.—contributes largely to the safety of this procedure.

But the winter months are very different from the summer, and probably, for patients in anything but the later stages, it is, of the two, the more beneficial time of the year; it is certainly at this time of year a remarkable climate. The average maximum temperature for these coldest six months is  $66^{\circ}$ , and for the coldest month is  $56^{\circ}$ . This the reader would think indicates no extreme degree of cold, but when we look at the minimum record we find the average for the same six months to be as low as  $34^{\circ}$ , and that during the coldest of these months the average sinks as low as  $24^{\circ}$ , or  $8^{\circ}$  below freezing point.

What actually happens is that there are cold, dry nights, followed by comparatively warm, bright,

sunshiny days. The humidity, in spite of the cold weather, when the air is only capable of holding a very small amount of moisture, averages only 16 per cent.

All this is very different from the patient's experience in England, where, when a frost sets in, it generally lasts day and night through for a longer or shorter period, and is more or less accompanied by mist and fog.

In the Free State the bracing effects of the cold are felt and enjoyed without any of these moist disadvantages, and I must here again reiterate what has already been referred to, that the dry cold, unaccompanied by fog or mist, is not injurious to the invalid, as is abundantly proved by the beneficial effects of the health resorts on the Swiss Alps.

The cold winters then, so far from being injurious, are probably the healthiest times in the year; the alternation of hot and cold seasons which relieves either from being too greatly felt, has a most invigorating effect on the constitution, and leaves very little to be desired in the way of climate by the consumptive invalid. Dr. Stollreither, of Bloemfontein, for many years an esteemed practitioner in that town, in writing to me upon this subject, regrets the absence of a proper sanatorium in Bloemfontein or some other portion of the Free State; and if some such place could be established on the principle of our hydro-pathic establishments at home, with a few additional comforts for invalids, it would undoubtedly wonder-

fully facilitate the treatment and cure of phthisis in the country. He adds :

“In spite of the insufficient accommodation, however, the results of the climatic cure are not only good, but often surprising.

“Suffice it to say that I have seen many a perfect cure of asthma, laryngeal and bronchial catarrh ; consumption of the lungs I have seen greatly improved and even cured.

“The climate is invigorating and strengthening, but there are two points to which I would draw attention, and which only too often prevent the beneficent influence of the climate on the sick organism. Patients often come up here with an idea that a residence of a couple of months is sufficient to cure them. Their business does not allow them to stay away a longer time from home. Of course those who come here with such ideas, who have not the time nor the means to stay here for their health alone, who cannot leave all other duties of daily life behind them, and only care for the restoration of their health, may not expect much benefit from this most beautiful climate. It is too difficult to say what period is required for recovery. It may take years, it may be that you will never be able to leave the country without injury to your partly regained health, without risking a fresh outbreak of the disease.

\* \* \* \*

“It happens in almost every case that patients,



after having been here some time, complain that they do not feel better—in fact worse, and often you hear them complain of being weaker than before; and I was only with the greatest difficulty and the full vigour of persuasion able to convince them that they must not expect from a climate so rapid a cure; that these symptoms are but natural on account of this most invigorating air, and that they will be followed by a most wholesome influence on the system. As by the change of climate the lungs and heart have to do more work than before, a feeling of weakness will soon be the result of it, and the more so, the weaker and lower the system is. But this overwork is just a beneficial stimulus, and soon will give way to a feeling of improvement and strength."

I think that further details are unnecessary, and sufficient has been said to convince anyone of the efficacy of the climate. I might go on quoting from this and that medical authority, but I think more need not be said.

As to the towns in the Free State, I need, I think, say little, but just indicate the most accessible.

#### BLOEMFONTEIN.

Bloemfontein, as the capital and largest town in the State, naturally first presents itself. Dr. Stollreither speaks well of its sanitary arrangements. The streets are wide, and the town is full of pretty gardens. It has a population of 2,000, and includes a consider-

able number of English inhabitants. It is easily accessible by rail from each of the Coast ports, and lies on the main line to Johannesburg. It is also accessible by rail from Kimberley by a rather roundabout journey.

The town is surrounded by low hills 200 to 300 feet high, and is on this account somewhat warmer than some of the other Free State villages. The hotel accommodation is fairly good, and arrangements for lodgings for invalids can be made at various boarding houses in the town. The surrounding country has many excellent farms, and pleasant changes may be had in this way.

#### BOSHOF.

Boshof is a pleasant little village only 30 miles from Kimberley, and about five hours' journey by coach. It is not picturesquely situated as to surroundings, but of late years it has thriven wonderfully, and gardens and trees fill the town, making it a pleasant relief to the eye during the summer months after the somewhat barren veld through which one passes to get to it. The climate is almost exactly similar to that of Bloemfontein. The hotel accommodation is especially good. Its ready accessibility from Kimberley made it in times past, and before the present railway system caused the whole Colony to be within easy reach of the holiday maker, a frequent health resort of the Kimberley people during the summer months. The

sanitary conditions and health of the town are all that could be desired, and, like other Free State districts, consumption is unknown in it as an idiopathic disease.

The Free State is now traversed by the main trunk line of railway to Johannesburg, so that it is much more easily accessible than it was at the time the first edition of this work was published. The climate is the same everywhere, except the most eastern portion, which is not so favourable for invalids, being at times bleak and damp. The Harrismith and Ladybrand districts, for instance, situated close to the eastern edge of the plateau enjoy an excellent summer climate, cooler, if not so dry as other parts of the Free State and Griqualand West. The winter, however, is much severer, and should, if possible, be avoided.

#### BASUTOLAND.

Basutoland, lying east of the Free State, is accessible only by cart or travelling waggon from either Bloemfontein or Aliwal North. A medical friend who for some time lived in the country for the benefit of his health, and whose knowledge and experience make his testimony reliable, writes me: "The climate is almost all that can be desired for a chest case, being cooler in summer than the Karoo, and though cold, still not excessively so in winter, while the variety of form and colour of the mountain scenery, the rich green of

the luxuriant grass in which blossom the buttercup and forget-me-not, to remind the traveller of home, the snug valleys waving with crops and watered by sparkling brooks in which the neat little kraals of the Basuto lie embosomed, and over all the crisp, clear mountain air and unclouded sky, make a picture of delight to one who has passed through the dull monotony of the "high veldt." But to travel in Basutoland requires strength and endurance; long rides over mountain paths or unmerciful jolting for many hours over the very worst of roads in a post-cart are the necessary accompaniments of locomotion, at the end of which the courtesy of a store-keeper may supply a lodging. Therefore the invalid should not attempt it till his powers are so far restored that a month's roughing it may be of service to him, and a long ride no danger.

#### THE TRANSVAAL.

In previous editions I have said little or nothing about the Transvaal, which is the tract of country lying north of the Free State, because it then possessed no features of special attraction, and was much more inaccessible than many other equally good climates in the country.

The development of the gold-fields in different districts, but more especially in the neighbourhood of Johannesburg, has rapidly changed the whole population and civilisation of the country, and has brought the railway line by leaps and bounds

across the wide-spreading plains of the Free State, through Bloemfontein and Cronstad, to the border of the Transvaal, which has been crossed, and has connected Johannesburg and Pretoria with every important town in the Cape Colony. Nor is the Natal line, with its steep gradients and sharp curves struggling through its mountain passes, behind, having also crossed the Transvaal border from the eastern side; so that it is now possible to make a complete tour of South Africa by rail, entering at Cape Town and coming out at Natal.

The large tract of country so suddenly made accessible, differs very much in climate in its many parts, and presents also points of difference from the other parts of South Africa described. Its elevation varies much more than that of the Free State, many parts being as much as 1,000 to 1,500 feet lower than the average Free State elevation.

Other parts, again, such as Witwatersrand, are as high, or higher than the Free State. The whole country is better watered, and has, in consequence, in many parts, a moister atmosphere and more luxuriant vegetation. I am sorry I cannot give more exact particulars of rainfall, humidities and temperatures, but they are at present unobtainable. The heat and cold vary considerably, according to the elevation, but excepting the features of difference mentioned, the climate is very like that of the Free State.

Johannesburg, the centre of the gold mining

industry, lies about 250 miles north-east of Bloemfontein.

It is probably now the largest town in South Africa, and of great commercial importance. It is well laid out with substantial buildings and wide streets, and the rapidity of its growth as well as the energy of its inhabitants are themes of frequent comment and admiration amongst those fortunate enough to class themselves as members of its community. The town is finely situated at a high elevation, and has a remarkably good climate, the heat in summer being much less than that of Kimberley, and the winters very cold and dry. The wind and dust are a somewhat trying feature at this latter season of the year. A correspondent writes me of it as follows:—"The town is finely situated at a high elevation, and has a climate, good but windy, and not quite so dry as the Karoo. There is much dust in the town itself, for the dryness of the air, the frequent traffic, and the vast heaps of 'tailings' from the mines, only require a light breeze to cloud the air. The suburbs, however, would probably be less objectionable on this account, and many of them are beautifully laid out and well planted with trees, which grow at a surprisingly rapid rate, while the country surrounding them is in many cases very pretty. The mines are a source of interest which will repay investigation, while the theatre, club, and library are excellently carried on. The hotels are many and of good class.

The public gardens are large and well kept, and afford a pleasant place to stroll, and the fine shops in the principal streets an attraction to the South African. There is a good hospital situated in what is probably the best situation in the town, the Hospital Hill, from which the town and railway on the one side, with the long line of tall chimneys which mark the situation of the 'reef,' form a contrast to the miles of undulating veldt on the other side, where the greed of man has found less to satisfy it."

Johannesburg has a climate which ranks highly, but as a resort for patients with chest tendencies, it has the disadvantage of being "town" and not country, and its dust is very trying. It forms a pleasant change during the hot months from Kimberley and other places where the summer heat is much felt. Its hotels and other comforts of living are, if expensive, equal to any others in South Africa.

Pretoria is the capital of the Transvaal, and here reigns Kruger the Great, surrounded by his ever-faithful band of Hollanders. The climate has some different features from that of the Rand; lying more than 1,000 feet lower than Johannesburg, from which it is only about 25 miles distant, surrounded by hilly country, and with water continually running through the town by furrows led from the adjacent river, it has, during the summer months, a much hotter and more enervating atmosphere than Johannesburg; moreover, fever, always more or less present in the up-country districts,

is more apt to prevail here than in the higher parts. The winter, however, is pleasant and milder than in the higher country, and from its sheltered position the somewhat trying cold winds of the neighbouring high country are a good deal toned down. Altogether it is a good enough place for our chest patient if he cannot get a better.

Potchefstroom is also not so good as some other parts of the Transvaal. Heidelberg, on the other hand, is high and bracing, though very cold in winter. Of Barberton and the De Kaap Gold Fields, lying due east of Pretoria, little need be said. It is too much of a fever country to take rank as a health resort.

#### BECHUANALAND.

Another country which the rail has made accessible to the traveller, and which, besides having an excellent climate for the health-seeker, is a fine field for the enterprising farmer, is British Bechuanaland—a tract of country lying due north of Kimberley and west of the Transvaal. The rail runs through Kimberley and through the capital, Vryburg, a distance of 120 miles from the former place. The air is bracing, and the elevation as high as the higher portions of the Free State and Transvaal; and Vryburg, although not more than a village, was the seat of government, and is a more lively residence than most places of its size in other parts of South Africa. It has one or two very comfortable hotels and an admirable little club, and I



should think a very pleasant time might be spent there.

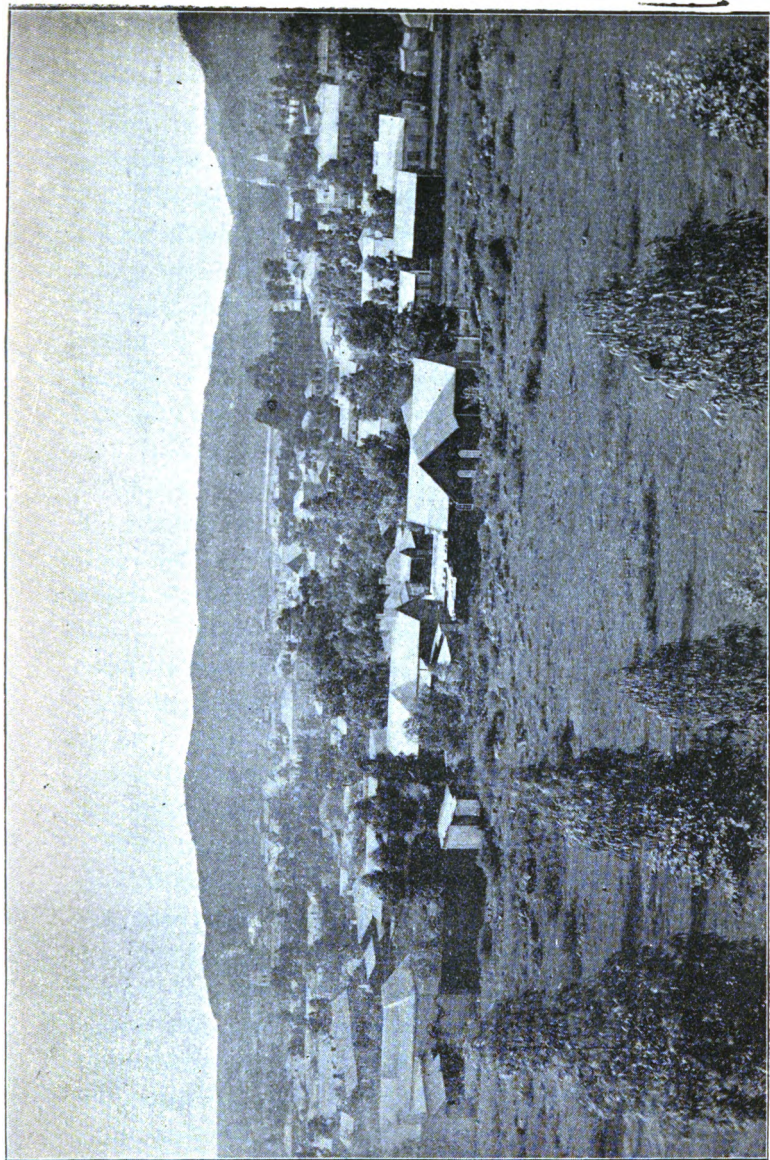
Mafeking is another little town, lying on the northern border of Bechuanaland, through which the railway passes; it is a very suitable residence for invalids.

Land in British Bechuanaland is cheap, and the country probably has a future before it as a good cattle-ranching district. It is fertile, and the rains more reliable than in some other of the up-country districts, making the growing of corn a fairly profitable industry.

#### RHODESIA.

Interesting as this country is to the traveller, both on account of its natural features and the mineral and other resources which are still awaiting development, it will generally be advisable for the health-seeker to content himself with the more easily accessible parts of South Africa for a few years to come until living and travelling in the new country are cheaper than they are just now. To the fortunate few, however, who are able to travel as they wish, a most interesting and enjoyable trip may be made through these regions so recently rescued from barbarism, and now invaded by the white man, the railway, and the bicycle.

The elevation of the country is high, from 4,000 to 5,000 feet, and continues northwards to the great



**BLOEMFONTEIN.**



plateau of Southern Africa already described, though as we approach the valley of the great Zambesi river the plane falls away to a lower level.

The climate of Rhodesia is not, on the whole, a trying one. It comes as something of a surprise to us when we look at the records of places like Salisbury, within  $18^{\circ}$  south of the equator, to find that the summer records of temperature for December, January, and February are slightly below those of Cape Town, and very far below those of many other parts of South Africa, such as Kimberley, the Karoo, and the Free State. The winter, on the other hand, has lost a little of its sting, although still a distinctly cold season. The rains, which occur principally during the summer months, are, as far as one can ascertain, of more regular occurrence and more plentiful than in the more southern portions of the plateau. They usually set in in earnest about December, and the rainy season continues for two or three months. The hottest months in the year are usually those which immediately precede the rains.

With these modifications, the leading features of the climate are those already described as characteristic of the high plateau of South Africa. The more regular, and for the most part, more abundant summer rains, render the humidity of most districts somewhat higher than that of the Karoo and similar areas, but the winters are still almost rainless. Of course there are variations, and wherever the level of the country sinks and surface moisture is apt to accumulate, the

summer heat becomes moister and less tolerable; but on the whole the climate is a fine one.

*Fever.*—From the beginning of the rains about December on to April and May, nearly the whole area of Rhodesia is more or less malarial, and although the type of fever in high and healthy districts is exceedingly mild, its presence is to be borne in mind by the health-seeker, who should plan his visit during May, June, July and August, during which months he may safely travel through all the higher parts. As the level of the country falls towards the East coast, we reach in Manicaland and towards Beira the most unhealthy districts, where fever is more or less prevalent all the year round, and is especially deadly during the summer months.

Bulawayo is at present the largest town in Rhodesia, and to-day forms the terminus of the main trunk line which is piercing the heart of Africa.

It is rising up at a great pace and substantial brick and stone buildings everywhere proclaim the confidence placed by the inhabitants in the future of the country. It is now reached in three and a half days from Cape Town, from which the distance is something over 1,350 miles, and the journey can be performed in one of the comfortable saloons of the Cape Government Railways. It lies 4,600 feet above sea-level and has a fine climate; the summer months, taking them all the way through, are not as hot as Kimberley, and, although after the December rains begin the atmosphere is somewhat

heavier, it is, on the whole, a pleasant climate at this season of the year. It is very healthy and almost free from fever all the year round, the winter being not so cold as that of the Karoo.

Salisbury is about another 260 miles to the north-east of Bulawayo, from which place it may be reached by a five days' coach journey. It is the older town of the two, and while the surrounding country is prettier and shows signs of being endowed with a brighter vegetation and a more copious rainfall, its situation, still some distance from the end of the rails, makes building very expensive, and it has, therefore, not shot up as rapidly as Bulawayo. But the little narrow gauge railway which climbs the East coast from the port of Beira has already surmounted its greatest difficulties, and from Umtali, where the whistle of the engine is now heard, the rails will soon be laid over the 150 miles which separate it from Salisbury. Salisbury is not a bad place for fever. Malaria does exist during the summer months after the rains, but it is not very prevalent or very severe. The summer heats are not trying and the nights are never sultry, while the winters are cold and bracing. The elevation is nearly 5,000 feet above sea-level.

Umtali is the little town which now forms the terminus of the narrow gauge railway from Beira. It is, at the time of writing, only a very small settlement of which much cannot be said, except that it is one of

the centres where gold reefs are numerous, and lies in the midst of a very beautiful country, well watered, well wooded, and broken into hills, valleys and mountains, as so often happens as we approach the edge of the plateau. From Umtali eastwards we soon begin to descend through Manicaland to the east coast, through a lovely, bold and mountainous country at first, and reaching at last the port of Beira through miles of swampy flat, not much above the sea-level. This is the most poisonous belt in the country, and as we descend from the higher regions, malaria becomes in certain districts a scourge almost impossible for medical science to deal with.

Although to-day Rhodesia must be visited carefully by the invalid, and preferably during the winter months, one may with safety prophecy that in years to come, should the country continue to develop as rapidly as it has within the last few years, many parts of it will be found equally health-giving, as regards chest diseases, with many other of the higher regions of South Africa.

I publish below some extracts from the meteorological records from Bulawayo and Salisbury; the former compiled by the Rev. N. Nicot and sent me by Mr. R. Sykes, the latter obtained for me by Mr. Grimmer. They are interesting as being the earliest records of the kind in this new country, and as showing the comparatively mild character of both summer and winter in both places.

## EXTRACT FROM METEOROLOGICAL RETURNS.

BULAWAYO.

From April, 1897, to March, 1898.

|                   | Mean<br>maximum. | Mean<br>minimum. | No. of<br>Rainy Days. | Rainfall. |
|-------------------|------------------|------------------|-----------------------|-----------|
| 1897.             |                  |                  |                       |           |
| April .. .. .     | 76·5             | 54·5             | 0                     | —         |
| May .. .. .       | 74·4             | 49·5             | 0                     | —         |
| June .. .. .      | 68·6             | 45·5             | 2                     | 0·14      |
| July .. .. .      | 75·3             | 45·8             | 0                     | —         |
| August .. .. .    | 75·6             | 47·8             | 0                     | —         |
| September .. .. . | 83·9             | 55·4             | 0                     | —         |
| October .. .. .   | 93·3             | 64·9             | 3                     | 0·23      |
| November .. .. .  | 90·3             | 62·9             | 7                     | 3·75      |
| December .. .. .  | 77·7             | 62·3             | 14                    | 7·23      |
| 1898.             |                  |                  |                       |           |
| January .. .. .   | 81·2             | 61·9             | 20                    | 8·30      |
| February .. .. .  | 79·2             | 59·5             | 5                     | 0·19      |
| March .. .. .     | 82·9             | 60·5             | 10                    | 2·15      |
|                   |                  |                  |                       | 21·99     |

Mean maximum—Daily record for one month averaged.

Mean minimum—Daily record for one month averaged.

Relative humidity—Time taken not stated, probably 9 a.m.

## EXTRACT FROM METEOROLOGICAL RETURNS.

SALISBURY, 1897.

|                   | Mean<br>maximum. | Mean<br>minimum. | Rainfall.  |
|-------------------|------------------|------------------|--|
| January .. .. .   | 79·8             | 59·9             | From Sept. 1895<br>to Sept. 1896,<br>35·5 in.            |
| February .. .. .  | 81·1             | 57·5             |  |
| March .. .. .     | 82·6             | 57·2             |  |
| April .. .. .     | 79·9             | 51·7             | From Sept. 1896<br>to Sept. 1897,<br>25·25 in.           |
| May .. .. .       | 76·1             | 47·4             |  |
| June .. .. .      | 71·4             | 43·6             |  |
| July .. .. .      | 76·3             | 44·4             | From Sept 1897<br>to June 1898<br>exclusive,<br>27·4 in. |
| August .. .. .    | 73·2             | 45·2             |  |
| September .. .. . | 83·5             | 52·1             |  |
| October .. .. .   | 87·8             | 62·2             |  |
| November .. .. .  | 85·0             | 60·9             |  |
| December .. .. .  | 79·0             | 61·2             |  |

From Umtali the records are incomplete for a full year, but read  
very much as Salisbury.



## NATAL.

In a former edition the climate of Natal was hardly alluded to. I felt, however, that no book on South Africa as a health resort could be complete without some fuller reference to this thriving colony. I have no personal experience of the climate, but cannot regard it as being as suitable for the health-seeker as Griqualand West, the Free State, Cradock, or Beaufort West Districts. It is decidedly moister than these districts, and I do not think in any part can boast of the all-the-year-round dryness possessed by them, a factor to which I attach the greatest importance. There is no doubt, however, I think, that many parts of Natal rank only second to these places, and quite on a par with the ordinary Eastern Province towns, such as Grahamstown, Queenstown, &c. For the following account I am indebted entirely to Dr. Bonnar, who has for some years been in practice in Durban, and has had considerable experience of the climate. Dr. Bonnar writes :

“In reviewing the special advantages afforded to patients by the different localities in the colony of Natal, a glance at its position and one or two of its leading physical features is necessary.

“Situated more or less to the north-east of its sister, the Cape Colony, its seaport, Durban, is about 6 days by water from Cape Town. Between these two ports there is a regular communication of two steamers

weekly, the well-appointed vessels usually touching at Port Elizabeth and East London on their way up the coast.

“ Looking broadly at its surface geography, we have stretching from its seaboard on the east, to its western boundary formed by the Drakensberg range of mountains, a gradually ascending series of well watered and verdant plateaux, each succeeding terrace land being more elevated than its eastern neighbour.

“ The climatic differences of these elevations as we proceed westwards are marked and form an important factor in considering the most suitable locality for those in search of health, more especially in connection with lung affections or a tendency thereto.

“ The coast belt extending inland for about 12 or 15 miles bears a more or less ever-green and semi-tropical appearance. Leaving this zone behind us, a few miles further inland bring us to a totally different region, especially as regards general aspect of country, average degree of temperature and humidity of atmosphere.

“ Gently undulating grassy slopes, ranges of hills, in some places beautifully wooded and all well watered, now take the place of the luxuriant coast lands, and as we proceed further westwards, we find, on reaching Pietermaritzburg, the capital, we have, during the 71 miles' journey by rail from Durban, gradually ascended to a height of 2,218 feet above sea-level. Continuing our journey in a north-

westerly direction, Howick, Estcourt, Ladysmith, and other health resorts are passed, till we arrive at Charlestown. The distance from the seaport to this town is 304 miles, the journey occupying about 17 hours, inclusive of stoppages. We have now ascended to a height of 5,383 feet, and are in a locality well-suited for particular pulmonary cases, especially during certain seasons of the year. Thirty miles westward from Ladysmith brings us to the Drakensberg mountains and the border of the Free State, the special advantages of which are elsewhere commented on.

“*Durban*.—This is one of the prettiest and best laid-out towns in South Africa. Its streets are broad and clean, its parks sheltered, and its accommodation for patients, its boarding houses and hotels exceptionally good. No more beautiful suburb could be imagined than that termed the Berea, which is situated on a hill of the same name overlooking the town, together with its landlocked Bay of five square miles, with the Indian Ocean in the background. The principal drive along the suburb extends for over two miles, and is bordered by substantially-built villas and beautifully-wooded grounds. During the winter months, April to September, the climate is most enjoyable, though compared with the more inland and higher localities its percentage of atmospheric moisture is considerable. This averaged 74 per cent. during the year 1886, the thermometer registering for these months about 67°

F., the mean maximum being 78° F., and the mean minimum 57° F.

“Like all districts of Natal, Durban has its dry season during the winter, when we have six months of bright clear sunny weather varied by occasional downpours of rain. Again referring to 1886, the meteorological statistics of the Durban observatory registered 40 days from April to September inclusive, on which rain fell, yielding a total of 11·6 inches. During the summer months—October to March—the climate is somewhat oppressive, the mean maximum daily temperature reaching to 85° F., with a mean minimum of 64° F. This, together with a moisture percentage of 76 per cent. and a rainfall of 28 inches, renders the summer more or less relaxing. The soil is sandy, and with macadamised roads made especially with a view to surface drainage, all traces of ordinary rain disappear with amazing rapidity.

“Looking more especially at the adaptability of Durban and the Natal Coast belt generally for phthisical cases, they cannot hold a first place as compared with such localities as Howick, Estcourt, or Ladysmith. The summer months are especially trying, but cases under my care have proceeded favourably, and some exceptionally so, during the winter season. Those who dread a low thermometric register may be advised to locate themselves near Durban between the months of April and September, and then they can with advantage proceed to a more

elevated and drier district. Patients subject to bronchitic affections, especially those of a chronic nature, find as a rule marked benefit or entire immunity from the disease. Some whose condition has hurried them from the mother country have, to my knowledge, been able after a few years' residence in Durban to return to England, and with care stand its climate comparatively well.

*"Pinetown.*—A village which lies 12 miles inland from Durban and at an elevation of over 1,100 feet, was a favourite health resort for coast patients before the railway rendered locomotion to the more upland districts so easy. It is just outside the coast belt and enjoys a drier atmosphere than Durban. Residents still lay themselves out for the reception of patients.

*"Maritzburg.*—Standing at a height of 2,218 feet above sea-level, Maritzburg, the seat of Government, enjoys a fairly attractive climate; though, compared with other parts of South Africa, it cannot be considered specially good for chest complaints. Its occasional hot winds are undoubtedly trying, and in the town itself the character of the soil favours the suspension of a certain amount of dust in the air, should the weather be at all boisterous.

"It is a picturesque town with its red-tiled houses and numerous blue gum trees. During the summer the heat though sometimes trying is comparatively dry, and during the winter the climate, especially a little

way out of town, is delightful. The mean average temperature from April to September is about 60° F., with a 9 a.m. humidity of 71·3. For the summer months—October to March—the mean average temperature is 69° F., with a mean atmospheric moisture percentage at 9 a.m. of 73·6, and at 3 p.m., 70·5.

“Dr. James Allen, who has been practising there for a considerable period, writes to me thus:—

“‘The chest diseases which derive most benefit here are phthisis and chronic bronchitis. I do not think it is a good place for asthma. At the same time I may say with regard especially to phthisis, without entering into particulars of any case, that I have known instances where persons suffering from consumption have derived remarkable benefit from residence here. Speaking generally of consumption and chronic bronchitis, I may say that both diseases are very uncommon amongst the natives. On the whole, I feel I am justified in saying that those suffering from either complaint will derive considerable benefit from residence here.’

“*Howick*.—This is at present perhaps the most fashionable resort for convalescents in Natal. Being but a little over 1¼ hours by rail from the capital, and standing at a height, 3,439 feet above sea-level, its clear bracing air and magnificent upper ‘Umgeni’ falls, 307 feet high, within a few minutes’ walk of its principal hotels, form attractive features, especially

to those who, engaged nearer the coast, cannot spare time to proceed for change of air to the further and still more elevated inland localities. One could not wish for a more healthy and reinvigorating atmosphere during the winter months; day after day being fresh and sunny, though at night the necessity for additional clothing is often felt. The village is comparatively sheltered by the surrounding hills, except towards the west, which partly accounts for its beautifully mild, though strengthening climate.

“During the summer months certain drawbacks must not be overlooked. Occasionally at this season, for several consecutive afternoons, we may have mists, not unfrequently accompanied by fine rain; and again towards the beginning of the warm season, high winds from the west prevail, usually continuing for one or two days and followed by a ‘three days’ rain.’ This, though beneficial to the farmer, is trying to the convalescent. The soil is porous and quickly absorbs any ordinary downpour of rain, and the absence of dust in the atmosphere is a beneficial and pleasing feature. The little village boasts of several boarding-houses and two good hotels, and special conveniences are arranged for invalids.

“The hygienic surroundings are exceptionally good. Dr. von Mengerhausen informs me that from 1883 to 1887 he has only had one death from consumption—and this case was brought to the locality, already the subject of far advanced disease. Asthmatic cases

generally derived decided benefit, specially those where the disease has been contracted in a humid climate.

“*Estcourt* district has, with good reason, been looked on as possessing one of the finest health-restoring climates in the uplands of Natal, more especially for those suffering from the more serious chest affections. Standing at a height of 3,833 feet above sea-level, the village occupies a site at the junction of the Little with the Larger Bushman’s River, and is 76 miles by rail from Pietermaritzburg. Lovely little bits of river scenery are found within a short distance, and the roads in the neighbourhood are good. Being in the midst of one of the finest farming districts in Natal, cases are not uncommon where invalids, being so far benefited or restored by its charming climate, have been induced to remain in the locality, and themselves embraced successfully a farmer’s life. In the village, good accommodation is afforded at the several substantial hotels, and for patients requiring special attention, arrangements can be made. In a wonderfully dry and invigorating atmosphere, markedly free from dust, the patient has a perfect climate during the greater part of the year; but Dr. Brewitt (of this town) advises a change ‘overberg’ to the Free State, especially during January, when a temperature and atmosphere similar to the *Estcourt* cooler months are obtained. Such a change is readily effected, *Estcourt* being but 7 hours by rail from Harrismith, in the Free



State. He advocates, further, a change to the coast during June and July for those who prefer a greater amount of warmth than is present in the clear and cold up-country mornings and evenings during the winter season.

*“Ladysmith.*—This town is on the direct main line to the Republics, at the junction where the railway branches to the Free State and to the Transvaal. Lying sheltered from the severe winds by reason of its protected position, Ladysmith enjoys special advantages for invalids. While the winter months—April to September—are dry and bracing and specially adapted for phthysical cases, its summer is decidedly warm; but patients can readily remove to the adjoining Harrismith portion of the Free State, where the summer climate is most attractive.

“The lovely Drakensberg range, which separates the two countries, is but thirty to thirty-five miles from Ladysmith. The town, which is built on a slope, is prettily laid out, the lower part being situated on the banks of the Klip River.

“Dr. Procter writes to me as follows:—

“‘After now nine years’ experience in the districts of Harrismith and Ladysmith, I can speak with confidence of the many beneficial results that I have seen with regard to cases of phthisis, bronchitis and asthma. I believe that these localities have only to be better known to be sought after by invalids suffering from one or other of these ailments.

“‘I have never known a single case of phthisis which has not been benefited from residence in these up-country districts; and in some few cases, I have seen the disease quite arrested and the patient able to lead once more a fairly happy life. The high elevation of these parts and the warm and dry climate make them especially suitable for chest complaints.

“‘For consumption I believe that residence in the winter on the Natal side of the Drakensberg, and in the summer on the Free State side, *i.e.*, in either the Harrismith or Bethlehem divisions, would give all that could possibly be desired or be obtainable in the way of climate; and I have, during my three years' residence in Ladysmith, seen several cases of asthma and phthisis which have wonderfully benefited by the climate.’”

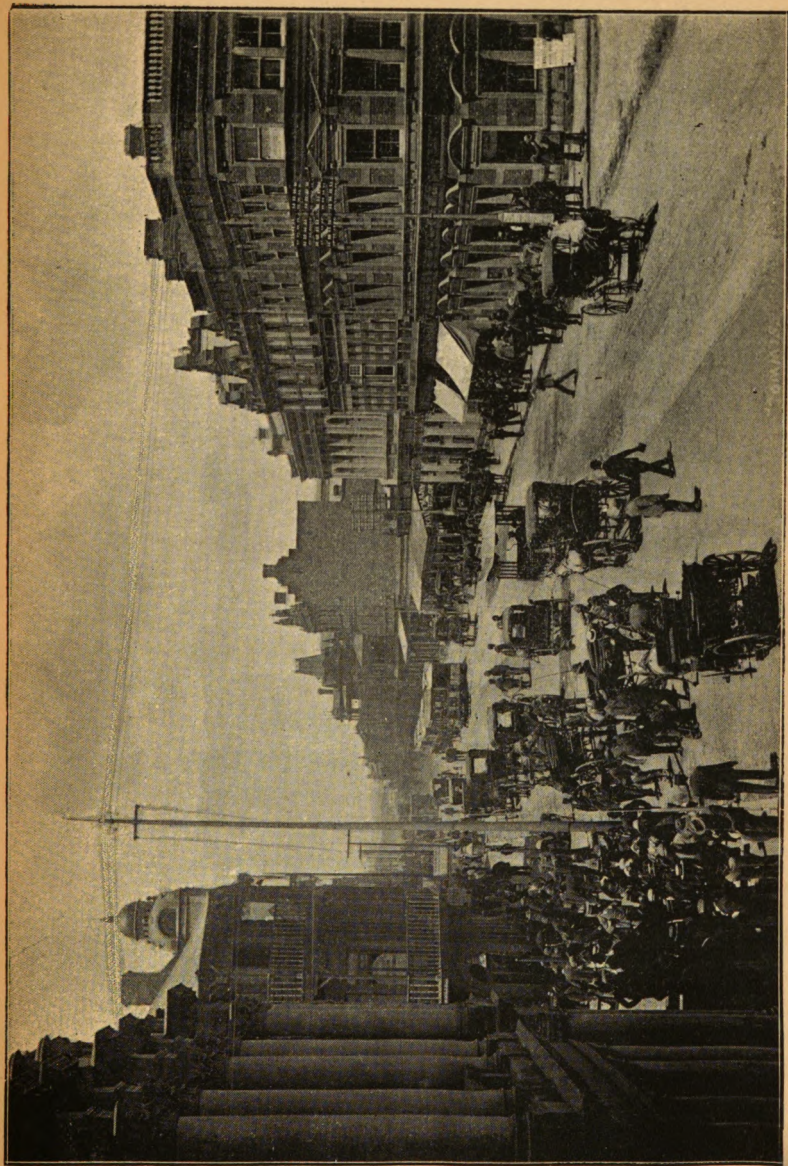
I would refer the reader to a handbook on South Africa published by Messrs. Silver and Co., in which he will find additional information which may be both useful and interesting to him in travelling through the country.

I cannot close this pamphlet without a few words of advice to the health-seeker, and first I would say to all—if you come at all, come early; if we are to do any good to cases of phthisis, it is no use to wait until the disease has advanced extensively. Every medical man knows that by the time he can detect tubercular deposit in the lungs with his stethoscope the case may be said to be fairly advanced. It is one

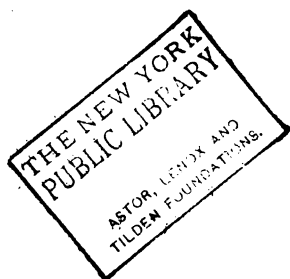
of the misfortunes of the disease that its onset is so insidious that as medical men we are often not consulted until considerable mischief is present. The recent facilities, however, for the bacteriological examination of sputa have given us a means of diagnosis which should be utilised early in every suspicious case. In this way valuable time may be saved. As to the class of cases which do best in our up-country climate it is difficult to lay down any rules beforehand ; cases of acute tuberculosis, where the disease runs a rapid course to a fatal termination in a few months, are hopeless anywhere, and of course should not be sent out ; but again, we have all of us seen occasionally cases apparently going downhill rapidly, with hectic temperature and every unfavourable symptom, undergo a complete change, the disease becoming quiescent, and the patient after a time becoming sufficiently well to be able to follow an occupation and live a comfortable life.

It is difficult to deny such the chance that the change of climate gives them, although it is a sad enough sight to see men as one too often sees them—landed in the country with a few pounds, no friends, too ill to work, and without any hope of recovery.

No man should come out to the country without a little money, unless his case is an exceptionally favourable one, and he is able, through introductions or by definite engagement, to make sure of being able to obtain work of a suitable kind. And if he has a little



COMMISSIONER STREET, JOHANNESBURG.



money do not let the mistake be made of trying to seek employment the moment he arrives. One who is able to give the climate a six months' trial, untied by having to earn a living, gives it a chance, and is able to judge at the end of that time how things are going with him. If his funds require careful hoarding, his best plan will be to go to some small up-country town, such as Beaufort, or Cradock, or in the Free State, and try and make arrangements to go and live on a farm in the neighbourhood.

The sanatoriums at Matjesfontein, Beaufort West, Middelburg and Nelspoort are not very expensive and are excellently situated. For those who are able to travel about I think change is of great advantage, and the Kimberley sanatorium is an excellent headquarters from which to visit other parts of the country. The summer months are hot and trying to some, and visits may be made to Johannesburg, during December and January, where the temperature ranges much lower, and the air is much more bracing at this time of year. The Stormberg districts (Dordrecht, Barkley East) are two excellent summer changes at this season of the year. Unfortunately the accommodation houses are only of the rough and ready South African type. Ceres, about 100 miles from Cape Town, is another useful change in the hot weather, as are also Grahams-town, on the Port Elizabeth line, and Stutterheim and Kei Road on the East London line, all furnished with fairly comfortable hotels. I greatly hesitate myself

to recommend a patient's change to the coast at this or any other season of the year until the chest has been quiescent for some time and improvement fairly established. I have often seen harm result from this course. When, however, the patient has improved sufficiently, the experiment may be tried, always I think under medical direction, and if it be found to be beneficial, may be extended and repeated from time to time.

There is no doubt that many who feel the up-country summer heat require some change of this kind, and often benefit greatly by it; it does not, however, always act favourably, and should be undertaken in the first instance with care. One fact should be borne in mind by all consumptives, as of the greatest importance—they should live as far as possible in the open air, and all close, stuffy rooms should be avoided. At night, during summer time, windows should be thrown widely open and air allowed to play freely through the bedroom; during winter also, windows should be kept slightly open at night unless the rooms are exceptionally large and airy. Exercise should be taken regularly and moderately, and of all exercises the safest perhaps is riding on horseback; cycling is an exercise apt to be abused, and should be used with great care if at all, especially by those inclined to be "short in the wind."

I have heard it frequently stated that our high elevations predispose to hæmorrhage, and that

hæmorrhagic cases should avoid the very high plateaus. It is not a point susceptible of proof very easily one way or the other, but I can say this with confidence, that many hæmorrhagic cases do exceedingly well up here. It has even seemed to me that cases which have an occasional hæmorrhage do better than some others. Hæmorrhage, be it remembered, though very alarming to the patient and often to the physician, is rarely fatal, and I have seen no reason whatever to think that it is more prevalent in our high altitudes than in other parts.

#### THE SEASONS.

Unfortunately I think most of our chest cases come out to South Africa about September or October to avoid the English winter, and they are a little apt to judge our climate by the summer months only. Now our "season" is or should be the winter months. I speak now of Kimberley, Griqualand West, the Free State and the Karoo. It is during this time that the air, dry during both times, has that bracing and exhilarating effect I have tried elsewhere to describe. The summers, though dry, and in this way of great service, are too warm to be always agreeable, and should be tempered where the heat is much felt by visits to the cooler districts I have already mentioned.

I would therefore advise anyone with a chest weakness not to wait until he has to run away from his own winter, but to come out at the earliest possible date, no matter what time of year. I think at what-

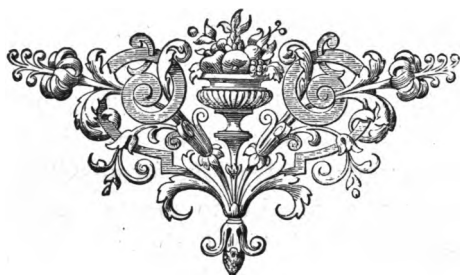


ever time of year he arrives he will do well to make at once for the higher levels. Arriving at Cape Town in the summer he may go on after a few days' rest to Ceres if the season (November to February) is favourable. After staying there a few weeks, go on to Matjesfontein, a little oasis on the border of the Karoo desert, where he will be able to kill time for a week or two in comfortable quarters. At Beaufort West is another sanatorium, and thence he may go on to Kimberley. At Kimberley he is in a good central position for visiting other parts by rail—Johannesburg, Natal, or the Eastern province of Bechuanaland. Rhodesia should be visited during the winter months, May to September, and I do not advise invalids to part from the railway, which takes them as far as Bulawayo, unless they are prepared to rough it in luxury—that is, by private waggon or coach, comfortably fitted up with sleeping accommodation, and a good cook. I need not say that such expeditions are expensive. Railway travelling is very comfortable; the trains are not fast, but are fitted up excellently with sleeping accommodation, and are not at ordinary seasons overcrowded. It is not necessary to particularise here further what parts of South Africa may be visited—there is plenty of it, as the visitor will find when he gets there, and although much is barren and uninviting, many parts are full of the most lovely mountain scenery. On the whole, by exploring the country in easy stages, a pleasant time may be spent, and the longer the trip is

spun out the better. Patients who think that three months away from England will set them up will find that they derive little permanent benefit from so short a visit, if actual disease is present.

As to clothing, every phthisical invalid should wear flannel or wool next the skin, summer and winter, but for the former season the lightest possible garments should be selected. For winter wear the clothing should be warm and very much the same as would be used for an English winter, and he will find many days when he is glad of a great coat.

Many men, as I have said, come out for their health and reach the country destitute, relying on the chance of obtaining immediate employment. Such are much to be discouraged. Situations for unskilled workmen and business men are by no means easy to obtain, though mechanics and skilled labour usually find work fairly easily. I must not close this little pamphlet, which pretends only to deal with one aspect—viz., the health aspect—of South Africa, and that in a very general manner, without recommending the visitor, be he tourist or health-seeker, rich or poor, to get a copy of Mr. Bryce's book, published early in this year—the most readable book on South Africa which has been published for a very long time, and full of interesting information of many kinds.



# UNION LINE TO SOUTH & EAST AFRICA.

*FAVOURITE & FASTEST ROUTE TO THE*  
**SOUTH AFRICAN GOLD FIELDS AND RHODESIA.**

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**The Union Steam Ship Co., Limited,**

HAS THREE DISTINCT SERVICES:—

- 1.—**THE FORTNIGHTLY MAIL SERVICE** with the Colonies of the Cape of Good Hope and Natal.
  - 2.—**THE COMBINED CONTINENTAL AND INTERMEDIATE SERVICE** from Antwerp, Rotterdam, Hamburg and Southampton to South and East African Ports to Delagoa Bay.
  - 3.—**THE EXTRA INTERMEDIATE SERVICE** from Southampton to South and East African Ports to Delagoa Bay and Beira.
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**The Fortnightly Mail Service.**—The steamers leave Southampton (under contract with the Cape of Good Hope and Natal Governments) every alternate *Saturday*, calling at Madeira, Cape Town, Port Elizabeth, East London and Durban (Natal).

**The Combined Continental and Intermediate Service.**—The steamers in this service leave Hamburg every 14 days, after calling at Antwerp and Rotterdam alternately, and sail from Southampton on alternate *Saturdays*, calling at Teneriffe, Cape Town, Port Elizabeth, East London, Durban (Natal), and Delagoa Bay. Madeira, St. Helena, and Ascension are called at at stated intervals by these steamers.

**The Extra Intermediate Service.**—The steamers in this service leave Southampton every 28 days (Wednesdays), calling at Lisbon, Madeira, Cape Town, Mossel Bay, Port Elizabeth, East London, Durban (Natal), Delagoa Bay, and Beira. The fares by these steamers are the same as by the Intermediate steamers.

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## PASSENGER FARES.

All Third Class Passengers to England are charged the Closed Cabin Rates.

| Mail Steamers.                    |            |                          |                                     | Intermediate Steamers. |            |                          |                                     |
|-----------------------------------|------------|--------------------------|-------------------------------------|------------------------|------------|--------------------------|-------------------------------------|
| 1st Class.                        | 2nd Class. | 3rd Class Closed Cabins. | 3rd Class Open Berths for MEN ONLY. | 1st Class.             | 2nd Class. | 3rd Class Closed Cabins. | 3rd Class Open Berths for MEN ONLY. |
| Guins.                            | Guins.     | Guins.                   | Guins.                              | £8-£10                 | £5         | £3                       | Guins.                              |
| 15                                | 10         | 6                        | ..                                  | 13                     | 8          | 6                        | ..                                  |
| 12                                | 8          | 6                        | ..                                  | 10                     | 7          | 6                        | ..                                  |
| ..                                | ..         | ..                       | ..                                  | 14                     | 9          | 6                        | ..                                  |
| ..                                | ..         | ..                       | ..                                  | 11                     | 7          | 6                        | ..                                  |
| ..                                | ..         | ..                       | ..                                  | 36                     | 23         | 13                       | ..                                  |
| ..                                | ..         | ..                       | ..                                  | 34                     | 22         | 16                       | ..                                  |
| 39                                | 25         | 13                       | 10                                  | 36                     | 23         | 13                       | 10                                  |
| England to Lisbon                 |            |                          |                                     |                        |            |                          |                                     |
| England to Madeira                | 42         | 14                       | 11                                  | 39                     | 25         | 14                       | 11                                  |
| Madeira to England                | 43         | 15                       | 12                                  | 40                     | 26         | 15                       | 12                                  |
| England to Teneriffe              | 44         | 16                       | 12                                  | 41                     | 27         | 16                       | 12                                  |
| England to Teneriffe              | 46         | 18                       | 14                                  | 43                     | 29         | 18                       | 14                                  |
| Teneriffe to England              | £50        | £20                      | ..                                  | £50                    | £33        | £20                      | ..                                  |
| England to St. Helena             |            |                          |                                     |                        |            |                          |                                     |
| England to St. Helena             |            |                          |                                     |                        |            |                          |                                     |
| England to Cape Town              |            |                          |                                     |                        |            |                          |                                     |
| " Mossel Bay & Port Elizabeth     | £52 10     | £35 10                   | £22                                 |                        |            |                          |                                     |
| " East London                     |            |                          |                                     |                        |            |                          |                                     |
| " Natal                           |            |                          |                                     |                        |            |                          |                                     |
| " Delagoa Bay                     |            |                          |                                     |                        |            |                          |                                     |
| Beira (Pungue River)              |            |                          |                                     |                        |            |                          |                                     |
| Chinde, Quillimane and Mozambique |            |                          |                                     |                        |            |                          |                                     |
| Zanzibar, Dar es Salaam and Tanga | £57 10     | £38                      | £22                                 |                        |            |                          |                                     |
| Ibo, Mombassa and Lamu            | £62 10     | £41                      | £23 10                              |                        |            |                          |                                     |
| Aden                              | £68        | £46                      | £26                                 |                        |            |                          |                                     |
| Bombay                            | £78        | ..                       | ..                                  |                        |            |                          |                                     |

CHILDREN under Fifteen Years old to be charged ONE SIXTEENTH of Full Fare for each year or part of a year of their age. Servants, Second Class Fare. Adults are allowed, Free of Charge, 20 cubic feet of Baggage, First and Second Class, and 10 feet Third Class.

THE RATES for all Classes include the use of bedding, Mess Utensils, &c., and a Free Pass by Rail from London or Plymouth to Southampton, or *vice versa*, for Passengers and Baggage, which can be obtained of the Company or their agents in England. Outward Passengers are freed from Dues on Baggage at Southampton.

RETURN TICKETS are issued at an abatement of ten per cent. off two single fares to all Ports up to and including Delagoa Bay and Beira by direct steamer of Union Company.

ALL the MAIL Steamers, except the "Moor", and ALL the INTERMEDIATE Steamers carry Open Berth Passengers.

These Fares are Subject to Alteration at any time by order of the Board.

## BAGGAGE ARRANGEMENTS.

**BAGGAGE.**—Each Adult First and Second Class Passenger is allowed to take Luggage to the extent of 20 cubic feet, free of charge; and Third Class Passengers are allowed 10 cubic feet, free of charge; the allowance for Children and Servants is in proportion to the amount of passage money paid for them. For all Luggage in excess of these allowances a charge at the rate of 2s. per cubic foot is made. If the quantity of Luggage in excess of the free allowance be large, it is advisable to ship it as cargo, taking out a Bill of Lading for it.

**DIMENSIONS.**—Packages intended *for the Cabin* should not measure more than 3 feet long, 2 feet broad, and 14 inches high in the First and Second Classes, and 10 inches high in the Third Class; they can then be stowed under the lower berths in all the Cabins. Those intended *for the Hold* should be so distinguished. Access to these at sea can always be obtained on certain days set apart for the purpose.

**LABELS** for Cabin and Hold, and others with the initial letter of Passenger's surname, are procurable from the Company's Offices, and the attention of Passengers is specially drawn to the necessity for fully addressing and carefully labelling their baggage.

**HEAVY BAGGAGE** must be delivered at the Nine Elms Station of the London and South Western Railway, to be sent to Southampton for Shipment at least two days before the Vessel's departure. The cost of conveyance from Nine Elms Station to Southampton is defrayed by the Company.

**GUN CASES** cannot be shipped unless accompanied by a declaration that they contain no gunpowder.

**INSURANCE.**—Lives, Baggage and Goods can be insured for the Outward Voyage through the Company's Offices in London and Southampton. Also Homeward Passengers can insure their Baggage through the Company's Offices and Agencies at Coast Ports.

**CLEARING BAGGAGE.**—The Table Bay Harbour Board points out to Passengers that the employment of a Baggage Agent to clear and deliver their Baggage is not compulsory, but that they are at liberty, if they wish it, to do so themselves.

The Cape Government Railway Department has an office at the Docks, near the Baggage Warehouse, for the booking of Passengers who wish to proceed from Cape Town by train, and will receive and forward the Baggage of such Passengers directly it is passed by the Customs Officers. For this convenience the following charges will be made, viz. : 6d. per Passenger in respect of luggage going by Passenger Train, in addition to any charge for excess luggage that may be leviable, and 1½d. per 100 lbs. (minimum charge 6d.) in addition to the Cape Town Goods rates for luggage forwarded by Goods Train.

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## RAILWAY ARRANGEMENTS.

**UNION LINE EXPRESSES.**—The "*Union Line Express*" Trains leave Waterloo Station (L. & S. W. R.) every Saturday as follows :—

- (a) For First and Second Class Passengers only at 11.40 a.m. for Mail Steamers from No. 1 Platform ; and at 11.55 a.m. for Intermediate Steamers from No. 2 Platform.
- (b) For Third Class Passengers only at 10.10 a.m. from No. 2 Platform for Mail and Intermediate Steamers.

These Trains are taken into the Southampton Docks alongside the Company's Steamer, and are timed to arrive about two hours after leaving Waterloo Station.

**RAILWAY FARES.**—Together with the Passenger Ticket for the Steamer a Railway Ticket is issued, entitling the Passenger to journey, *free of charge* in a corresponding Class, from the Waterloo Station of the London and South Western Railway to Southampton.

HOMEWARD-BOUND Passengers will be provided with a free Railway Ticket from Southampton to Waterloo Station, London, on application to the Captain's Clerk on board.

### FRIENDS OF OUTWARD OR HOMEWARD PASSENGERS

are permitted to travel *from London to Southampton and back* on payment of a *Special Fare*, either First, Second or Third Class (15/6, 11/- and 6/6 respectively), on presenting at the London and South Western Railway Company's Booking Office, Waterloo Station, a Coupon, which can be obtained at the Union Company's Office, South African House, 94 to 98, Bishopsgate Street Within, London, E.C.

## South African Railways.—Passenger Fares.

### THE GOLD FIELDS.

The Chief Centres of the Gold Fields in the Transvaal are JOHANNESBURG (Witwatersrand) and BARBERTON, which can be reached in the following ways:—

#### To WITWATERSRAND.

|                                       | Miles. | Hrs. | SINGLE FARES. |    |    |            |    |    |
|---------------------------------------|--------|------|---------------|----|----|------------|----|----|
|                                       |        |      | 1st Class.    |    |    | 2nd Class. |    |    |
|                                       |        |      | £             | s. | d. | £          | s. | d. |
| <b>Cape Town to Johannesburg ..</b>   | 1,015  | 50½  | 11            | 11 | 9  | 7          | 19 | 6  |
| <b>Port Elizabeth to Johannesburg</b> | 715    | 40   | 8             | 4  | 0  | 5          | 18 | 5  |
| <b>East London to Johannesburg..</b>  | 666    | 40   | 7             | 18 | 0  | 5          | 6  | 0  |
| <b>Durban to Johannesburg ..</b>      | 483    | 26½  | 6             | 1  | 0  | 4          | 6  | 6  |

PRETORIA.—The time occupied to Pretoria is two hours longer than to Johannesburg, and the additional fares are 7s. First Class; 6s. Second Class, and 4s. 6d. Third Class.

Arrangements have been made for MINERS, SINGLY OR IN PARTIES, who book by the Union Company's Steamers at the reduced rate, to travel to Kimberley or Viljoens Drift at reduced fares, particulars of which can be ascertained on application at the offices and agencies of the Company, but a certificate must be produced at the booking office in the Colony from the last employer, intimating that the bearer has been employed as a miner.

#### DELAGOA BAY ROUTE.

|                                    | Miles. | Hrs. | FARES.     |    |    |            |    |    |
|------------------------------------|--------|------|------------|----|----|------------|----|----|
|                                    |        |      | 1st Class. |    |    | 2nd Class. |    |    |
|                                    |        |      | £          | s. | d. | £          | s. | d. |
| <b>Delagoa Bay to Pretoria ..</b>  | 349    | 24   | 4          | 5  | 6  | 3          | 8  | 0  |
| <b>Delagoa Bay to Johannesburg</b> | 395    | 27   | 4          | 17 | 0  | 3          | 17 | 0  |
| <b>To BARBERTON.</b>               |        |      |            |    |    |            |    |    |
| <b>Delagoa Bay to Barberton ..</b> | 186    | 9    | 1          | 12 | 6  | 1          | 5  | 6  |



## South African Railways.—Passenger Fares.

### THE BRITISH SOUTH AFRICA COMPANY'S TERRITORIES.

#### MAIN ROUTES.

There are two Main Routes from Cape Town to Rhodesia :—

1. "Overland Route," *i.e.*, by Rail to Bulawayo, and thence by Coach to Salisbury.
2. By the "East Coast Route," *i.e.*, by sea to Beira, at the mouth of the Pungwe River, and then *via* the Beira Railway and Coach.

#### 1. OVERLAND ROUTE TO MASHONALAND, *via* BECHUANALAND and MATABELELAND.

RAIL, POST-CART, AND COACH ROUTE FARES.

|   | Miles. | Time<br>about. | FARES.     |    |            |    |            |    |
|---|--------|----------------|------------|----|------------|----|------------|----|
|   |        |                | 1st Class. |    | 2nd Class. |    | 3rd Class. |    |
|   |        | Hours.         | £          | s. | d.         | £  | s.         | d. |
| <b>Cape Town to Bulawayo by Rail</b> .. .. .  | 1,360  | 93             | 18         | 8  | 11         | 12 | 5          | 11 |
| <b>Bulawayo to Salisbury by Coach</b> .. .. . | 260    | 5 days         | 15         | 0  | 0          | 15 | 0          | 0  |

#### 2. EAST COAST ROUTE to MASHONALAND *via* BEIRA.

|   | Miles. | Time<br>about. | FARES.     |                 |          |                 |    |   |
|---|--------|----------------|------------|-----------------|----------|-----------------|----|---|
|   |        |                | 1st Class, |                 | Natives. |                 |    |   |
|   |        | Hours.         | £          | About.<br>s. d. | £        | About.<br>s. d. |    |   |
| <b>Beira</b> to Umtali by Rail .. .. .      | 222    | 23             | 6          | 0               | 0        | 1               | 10 | 0 |
| <b>Umtali</b> to Salisbury by Coach .. .. . | 150    | 2½ days        | 6          | 0               | 0        | 6               | 0  | 0 |

## South African Railways.—Passenger Fares. THE DIAMOND FIELDS.

|                                       | Miles.     | Hrs.       | FARES.     |    |            |   |            |    |
|---------------------------------------|------------|------------|------------|----|------------|---|------------|----|
|                                       |            |            | 1st Class. |    | 2nd Class. |   | 3rd Class. |    |
|                                       |            |            | £          | s. | d.         | £ | s.         | d. |
| <b>Cape Town to Kimberley..</b>       | <b>647</b> | <b>33½</b> | 8          | 1  | 9          | 5 | 7          | 10 |
| <b>Port Elizabeth to Kimberley ..</b> | <b>485</b> | <b>30½</b> | 6          | 1  | 3          | 4 | 0          | 10 |
| <b>East London to Kimberley ..</b>    | <b>546</b> | <b>43</b>  | 6          | 16 | 9          | 4 | 11         | 2  |

Passengers wishing to pay their Railway Fares before leaving England may do so at the Union Steam Ship Company's Offices, London or Southampton, and receive in exchange a voucher, the presentation of which at the Railway Booking Office at Cape Town, Port Elizabeth or East London will obtain the necessary Railway conveyance.

**SPECIAL CONCESSION REGARDING RETURN TICKETS BY CAPE GOVERNMENT RAILWAYS.**—Persons purchasing return tickets for either of the Ports at stations distant more than 450 miles therefrom, for the purpose of proceeding to Europe, are allowed *seven* instead of *three* months in which to complete the backward journey, provided that, prior to returning by rail, they present a certificate from the Steamship Company to the effect that they have actually travelled to and from Europe and are leaving Cape Town, Port Elizabeth, or East London on the return journey within one week of their disembarkation.

**OVERLAND ROUTE TO CONNECT WITH STEAMERS.**—Passengers proceeding from Durban by Steamer to England, and desiring to travel overland from East London to Cape Town, may obtain at East London, First Class Rail Tickets at Second Class Fares, such tickets being available by Fast Weekly Saloon Trains, or Second Class Tickets at Third Class Fares, available by Ordinary Trains on production of a certificate from the Steamship Company.

Similar Rail Tickets are issued to Port Elizabeth and East London from Cape Town to Passengers arriving from Europe, and proceeding to Durban by Steamer.

Such Passengers wishing to visit the Diamond Fields may have their Through Tickets available to proceed *viâ* Kimberley on payment for the additional mileage at the concessionary rates.

*(The above information is obtained from, and is subject to alteration by the railway authorities concerned.)*



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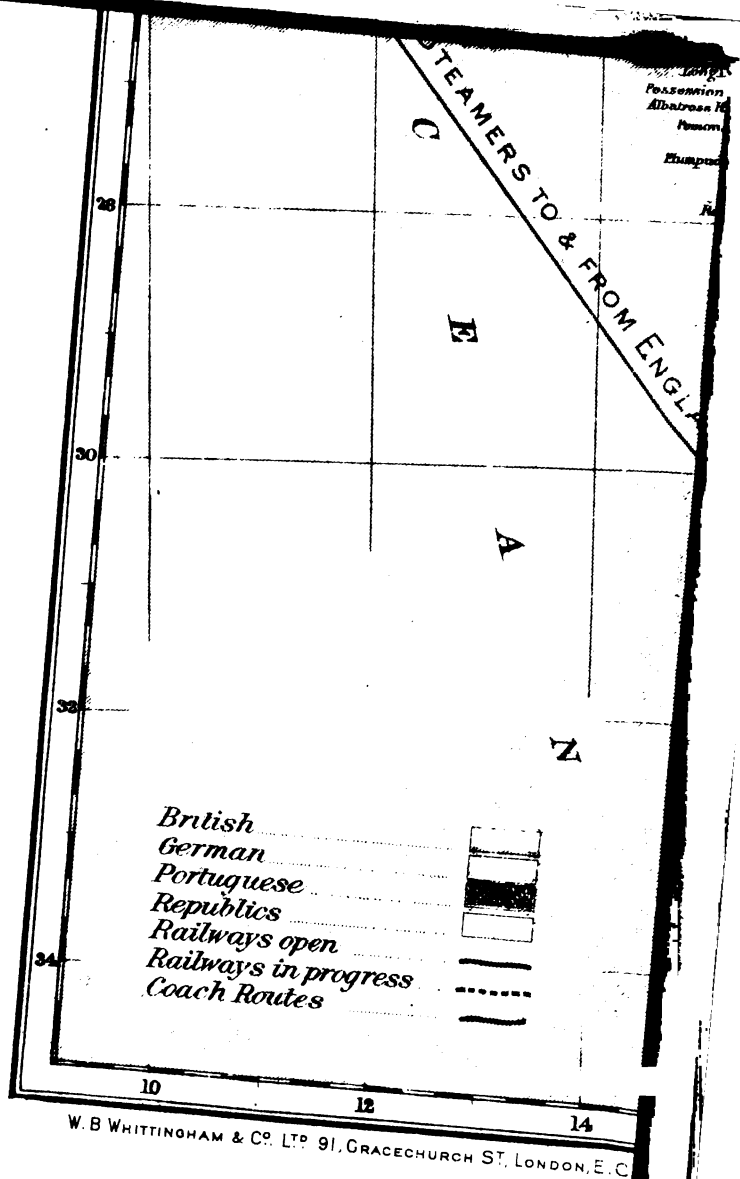
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ROYAL MAIL STEAMERS.

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FLEET:**

|             | TONS.  |                        | TONS. |
|-------------|--------|------------------------|-------|
| SAXON ..    | 10,300 | GAUL }                 | 4,744 |
| BRITON ..   | 10,248 | GOTH } (Twin-Screw) {  | 4,738 |
| SCOT ..     | 7,815  | MEXICAN ..             | 4,661 |
| NORMAN ..   | 7,537  | MOOR ..                | 4,464 |
| GERMAN ..   | 6,763  | SABINE ..              | 3,805 |
| SANDUSKY .. | 6,315  | SUSQUEHANNA ..         | 3,712 |
| GASCON ..   | 6,288  | TROJAN ..              | 3,652 |
| GAIKA ..    | 6,288  | SPARTAN ..             | 3,487 |
| GOORKHA ..  | 6,288  | ARAB ..                | 3,192 |
| GUELPH ..   | 4,916  | NATAL }                | 158   |
| GREEK ..    | 4,747  | TITAN } (Twin-Screw) { | 150   |

**Union Line Expresses from Waterloo every Saturday.**

The **Royal Mail** and **Intermediate** Steamers sail from **Southampton** on alternate **Saturdays**, making a **Weekly Service** to **South** and **East African** Ports.

The **Mail** Steamers call at **Madeira**, and the **Intermediate** Steamers at **Teneriffe**, unless Quarantine restrictions interfere.

An **Extra Intermediate** Steamer will sail from **Southampton** monthly (Wednesdays), calling at **Lisbon**, **Madeira**, and all **South** and **East African** Ports to **Delagoa Bay** and **Beira**.

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